University of Alberta Library
0 1620 2956696 3

University of Alberta

The Impact of Resource Allocation Methods on the Performance of the Academic Staff at Public Universities in Zimbabwe

by

Michael Tonderai Kariwo

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

in

Educational Administration and Leadership

Educational Policy Studies

© Michael Tonderai Kariwo

Fall 2010

Edmonton, Alberta

Permission is hereby granted to the University of Alberta Libraries to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only. Where the thesis is converted to, or otherwise made available in digital form, the University of Alberta will advise potential users of the thesis of these terms.

The author reserves all other publication and other rights in association with the copyright in the thesis and, except as herein before provided, neither the thesis nor any substantial portion thereof may be printed or otherwise reproduced in any material form whatsoever without the author's prior written permission.

UNIVERSITY LIBRARY
UNIVERSITY OF ALBERTA

Examining Committee

Dr. Ali Abdi, Educational Policy Studies, Supervisor

Dr. Jose da Costa, Educational Policy Studies

Dr. Rosemary Foster, Educational Policy Studies

Dr. Frank Peters, Educational Policy Studies

Dr. Ingrid Johnson, Secondary Education

Dr. Njoki Wane, OISE/University of Toronto, External Examiner

DEDICATION

I wish to dedicate this thesis to my family. I had tremendous support from Delia my wife. She was a pillar in many ways. In addition my children, Kudakwashe, Tonderai, Kumbirai and Michael Jr. as well as Milton, my son- in- law, were all very supportive. I wish to thank them for all the years they gave me moral and material support. To my late father and mother I say, your inspiration and encouragement has now come to fruition.

ABSTRACT

This study was undertaken to determine the impact of resource allocation on the performance of faculty at public universities in Zimbabwe. These institutions are facing reduced public funding of enormous proportions and yet student enrolments have been increasing rapidly as a response to post independence measures taken to redress colonial imbalances. The net result is, while quantitative gains, in terms of access, have been achieved, the quality of university education has been decreasing.

I conducted this qualitative study to get an in-depth understanding of the problem. As a theoretical framework, I used the Production model and Institutional Theory. I conducted 22 targeted interviews and the respondents included professors, senior university administrators and senior government officials. I also analysed some key documents, such as University Acts which are statutory instruments for establishing the institutions; government policy documents which included reports by Presidential Commissions of Inquiry and strategic plans from Government and the Universities. I then used thematic content analysis to analyse the data.

The study revealed that public universities in Zimbabwe were seriously under-funded and their function has been greatly constrained by limited resources. At the national level the study revealed that there were

systemic problems in policy making. For instance the funding model currently in use, was not effective because of the rapid expansion in University education that was taking place. At the institutional level, there were issues of inadequate resources, weak academic leadership and reduced capacity caused by the "brain drain." These factors formed barriers to the performance of the academic staff. I concluded by suggesting some recommendations for turning around the situation. The main recommendations include the crafting of a new model for funding public universities, and strategies for arresting the "brain drain." In developing a new funding model, consideration should be given to the role of strategic planning, which is used successfully in many countries as a basis for resource allocation at both the national and institutional levels.

ACKNOWLEDGEMENTS

There are several people who gave me support and encouragement in completing this dissertation and I am really indebted to all of them. I would like to make special mention of Dr Ali Abdi, my supervisor. He was very accessible throughout my studies. That is important, because it reduced the stress associated with the demands of such a protracted study. Producing a dissertation at this level involves a lot of research and writing, but more important, adequate guidance is critical and Dr Abdi gave me the necessary support.

I also wish to thank the other members of my Research Committee who provided invaluable insights. Dr Jose da Costa and Dr Rosemary Foster went through the drafts meticulously and their comments helped me refine my thoughts. In addition, a word of thanks to those of the Examining Committee, who fall outside the ambit of the Research Committee. I wish to thank Dr Frank Peters, the Chair of the Examining Committee, Dr Ingrid Johnson and the External Examiner, Dr Njoki Wane.

Because I did my field work in Zimbabwe, I do wish to thank all those that made my data collection a success. The list is long and regrettably, I cannot mention everyone by name. However I wish to thank all the Vice Chancellors of the public universities that gave me access to their institutions and the senior government officers from the Ministries of Finance and Higher Education for the time they spent on the interviews.

ABBREVIATIONS

BUCSE	Bindura University of Education
CUT	Chinhoyi University of Technology
EEC	European Economic Community.
HIT	Harare Institute of Technology
LSU	Lupane State University
MSU	Midlands State University
NUST	National University of Science and Technology
UZ	University of Zimbabwe
ZIMDEF	Zimbabwe Manpower Development Fund
ZOU	Zimbabwe Open University

Table of Contents

CHAPTER ONE 4
OVERVIEW OF THE STUDY 4
Background 4
Importance of the Study 8
Delimitation of the study 12
Limitations 12
Definition of Terms 13
Organization of the Thesis 14
CHAPTER TWO 16
HIGHER EDUCATION IN ZIMBABWE 16
The Background 16
Human Development 17
The Economy 19
The Policy Environment 22
Governance 28
Financing Higher Education 30
Development of University Education 34
Rethinking Zimbabwean Higher Education 42
CHAPTER THREE 45
REVIEW OF RELATED LITERATURE 45
AND THEORETICAL ANALYSIS 45
Institutional Theory 45
The Production Model 47
LITERATURE REVIEW 50
Government-University Relationships 54
Funding and Resource Allocation Models 56
Budgeting processes and impact on performance 60
Financial Diversification 63
A Synthesis of the Literature and Conceptual Framework 65
CHAPTER FOUR 68
RESEARCH DESIGN AND METHODOLOGIES 68
The Theoretical Conception 68
Ontology 69
Epistemology 69
Axiological Assumptions 70
Rhetorical Assumption 72
Trustworthiness 72
Document Review 75
Interviews 77
Selection of Participants 78
CHAPTER FIVE 79
ANALYSIS, INTEPRETATION AND DISCUSSION 79
Government Policies 79
The Government Funding Model 80

Shift to Performance Based Management....81
Inefficient Use of Resources....85
Institutional Capacity....87
Organizational Culture....90
Funding and Resources....92
Teaching Equipment and other Resources....95
Financial Diversification....97
Donors....98
Tuition Fees....101
Income Generation....105
Faculty Performance....110
Personal considerations and commitments....115
Sociological and Economic Factors....116
Quality of Teaching and Research....121
Graduate Output....123
Research Output....124
Challenges, Cultural change and Institutional Renewal....130
Strategic Planning....132
Consolidation....139
DISCUSSION....144
Government Policies....144
CHAPTER SIX....149
FINDINGS, CONCLUSIONS AND RECOMMENDATIONS....149
The Impact of Government Policies....149
The Problems of the Current Funding Model....150
Brain Drain and the Quality of University Education....151
The Coping Strategies of Professors....152
Revitalization of Higher Education....153
Coordinating Higher Education Strategic Planning....154
RECOMMENDATIONS....157
Crafting a New Policy Framework....157
A New Funding Model....158
A Strategic Planning Framework for Higher Education....159
Increased Public Funding and Consolidation....159
Investment in Information Technology....160
Alternative Sources of Revenue Generation....160
Increased Efficiency at Government and Institutional levels....161
Engaging the International Community....162
CHAPTER SEVEN....165
REFLECTIONS, IMPLICATIONS OF THE STUDY....165
AND CONCLUSION....165
Implications for the Study....171
Contribution to Knowledge....171
Implications for Further Research....172
Implications for Practice....174
CONCLUSIONS TO THE DISSERTATION....175

REFERENCES 179
APENDIX I: The Zimbabwe Open University Programs 193
APPENDIX II: Letter of Consent to Participants 194
APPENDIX: III Interview Schedule 195
LIST OF TABLES 196
LIST OF FIGURES 197

CHAPTER ONE

OVERVIEW OF THE STUDY

Background

Universities play an important role in the development of any nation. They accomplish this function through the production of highly skilled people and the creation of new knowledge. Universities in Zimbabwe fulfil a particularly critical mission. They have key roles in research, evaluation, transfer of information and technology development and for many years have fulfilled a particularly critical mission. Their special function has been to combine education with research, thus satisfying society's need for knowledge through scholarly inquiry, scientific investigation and graduate training. Other than a couple of polytechnics in the country, the universities have been the only national institutions with the equipment and the mandate to generate new knowledge, or adapt knowledge for solving local problems.

The crisis in African universities is that over the years there has been a gradual decline in the funding from government in real terms, due to the declining economies. In Zimbabwe the funding of universities has been negatively affected by the economic meltdown. Today the country has had to accept the use of multiple foreign currencies after the local currency collapsed due to hyper-inflation. The problem was compounded by a serious shortage of foreign exchange. For universities the result has been staff losses due to low salaries and poor working conditions, under-funded research activities, overcrowded facilities, lack of maintenance of university buildings and equipment.

There has been interest for me as a scholar to investigate this crisis in higher education and attempt to provide some solutions. I worked as a senior university administrator for many years at two of the largest public universities. I was a director of planning in one of the institutions and registrar in the other. Having worked with the system and now observing it from a distance, I feel that Zimbabwe provides an illustrative example of the development of higher education in a developing country. I believe that many international scholars are looking for empirical data on the current state of higher education in Zimbabwe, firstly because the country is one of the few that needs to survive economic collapse and secondly, the political framework is going through a testing phase. SARUA (2010) has an initiative to rebuild Zimbabwean Higher Education and this involves research and capacity building at institutions of higher education in Zimbabwe. Earlier on the UN, IRIN (2003) reported on the problems faced by universities in Zimbabwe under its project for Humanitarian Assistance. There is therefore interest in understanding the crisis more deeply.

After many years of a de facto one party government, under the Zimbabwe African National Union Patriotic Front (ZANU-PF) party, a government of national unity was put in place recently and is being tried between the ruling party and the opposition party, the Movement for Democratic Change (MDC). The overarching question raised is, "What are the education models that can come out of this situation as lessons for other developing countries?" My study reveals some very important findings. One important conclusion is that educational

policies need a supportive political and economic framework. In Zimbabwe, this condition should be urgently addressed by all stake-holders.

It is natural that when institutions of higher education are in a state of crisis, their study and research on their genesis, development and way of operation become of national and international significance and importance. A report by the World Bank (2000) states that the problem of higher education in Africa is that the quality of university education has declined significantly as a result of dwindling resources during a period of rapidly growing enrolments. To further compound the problem, universities seem not able to maximize the use of those resources that they have because of internal inefficiencies. Blair (1997) observes that most first generation universities in Africa have been characterized by considerable internal inefficiencies such as low staff to student ratios, high complements of non-academic staff, high student drop-out and repeat rates, low graduation rates, high non-education expenditure in residences. In many cases, the budgets are expended in areas which are not the core business of the university such as the operation of security services, bookshops, garages, bakeries.

This study focuses on the perceptions of university personnel and government officials on the impact of resource allocation, and utilization in African universities, in particular the effects on teaching, learning and research as well as outreach programs. It addresses the broad question, "How does the allocation of resources affect the performance of universities, and in particular the work of professors? In addressing this question I hoped to throw some light on the

causes of the general decline of African universities which is without solution to date.

LOCATING MYSELF IN THE STUDY

I started my career as a high school teacher and then changed to administration when I was appointed a school principal. After a few years I decided to join a postsecondary institution to further my career. I got a position as an Assistant Registrar at one of the largest public universities in Zimbabwe. After serving in this capacity for three years I was promoted to the position of Director of Planning. While I was in this position I got involved in the planning of a new university where I eventually went to join as Registrar. Throughout my career I was constantly meeting challenges on the funding of the institutions and their performance. In general there were problems of inadequate funding from government. Within the universities we used to have lengthy discussions on how to allocate the few resources to the departments. Quite often it was the voice of the Vice Chancellor that prevailed. I started developing some curiosity on how best universities could handle issues of resource allocation. The position of Director of Planning exposed me to some of the models used in resource allocation but I did not get all the answers that I needed. I found the deliberations at the budget meetings fascinating as senior administrators such as the bursar and senior professors grappled with the question of distributing limited resources. As I travelled around to various African universities for conferences I discovered that Zimbabwe was not alone in this dilemma of trying to manage its higher education

with little resources. I became motivated to try and understand what the issues were. I therefore decided to embark on my current studies and research.

One of my beliefs is that higher education is critical for national development and should be it should be accessible to everyone. Having said that, the way higher education is funded will differ from country to country. In Zimbabwe, due to the level of resources, I would advocate a mixture of public funding and private finding. Wider access into higher education is a necessity given the political history of the country. Some people have argued for free university education while others have said that students need to pay a fair amount in tuition fees. I believe that those who can afford should pay realistic fees while those who cannot afford should be supported by government through bursaries. Higher education is an expensive enterprise and the government cannot be expected to bear the full cost of providing it. My second belief is that universities have the capacity to produce transparent policies and methods of distributing resources for the efficient running of the institutions. This belief comes from my assumption that in universities there is a pool of not just highly skilled manpower but many intellectuals.

Importance of the Study

There is need to examine the issues surrounding financing public universities in Zimbabwe because of the unprecedented rate of expansion of this sector since independence. While Tilak (2003) observed that focusing on higher education investment in Africa could help technological catch up and maximize

economic output the problem in Zimbabwe is that of economic collapse. It is therefore important to balance access with investment in university education. I am aware for instance that the Dakar Conference, UNESCO (2000) on "Education for All" concentrated on primary education for social change and ignored tertiary education altogether. The main reason has been lack of empirical evidence on the impact of higher education. Recent studies, for example, Bloom, Hartley and Rosovsky (2006) show that there are private and public benefits from higher education

There are several studies that have focused on the funding of universities in sub-Saharan Africa, (Afolayan, 2009; World Bank, 2000, 2004a and 2009). There are also studies that have examined resource allocation at the system level such as those by Jongbloed, Vossenteyn and Hans (2001) and Leifner (2003). However there are a few recent studies exploring the effects of resource allocation and utilization on the performance of African universities given that there is a general decline in state funding throughout the continent (e.g. Banya & Elu, 2001). In Zimbabwe specifically, there has been no comprehensive study on the allocation and utilization of resources in higher education since the proliferation of both state and private universities started in 1997. Kariwo (2007) observed that widening of access was at the cost of quality given the shrinking public funding and an inefficient resource allocation system.

This study sought to contribute to the body of knowledge on the financing of higher education, by addressing what seems to have become a serious problem for mainly African universities, namely continuous decline, and inability by

governments and universities themselves to stabilize the situation, let alone induce renewal. Additionally the study attempts to provide a basis for strategic planning which takes into account government and university objectives. In Zimbabwe, the government argued that universities are wasteful and unproductive, while universities provide a counter argument that the government is under-funding the institutions and investing in other sectors which may not be as important as higher education. Through this study I also intended to provide the much needed data for policy formulation as well as the management of universities as institutions of higher education. Such data can be used on a wider forum regionally and internationally. Finally, the study is the first of its kind as was confirmed by many of the interviewees. As such it should make a significant contribution.

Objectives of the Study

The purpose of the study was to have a better understanding of how funds were allocated from government and within the universities and how the processes influenced the performance of staff and students. This was be achieved through the following objectives which were to:

1. establish a clear understanding of how resources are being allocated within state universities in Zimbabwe.
2. determine how the current levels of resources impact on the work of the academic staff.
3. determine how best the state should approach the issue of university funding in Zimbabwe and the strategies to be adopted by the universities.

RESEARCH QUESTIONS

In this study, I addressed the following main research question: "What were the perceptions of university staff and senior government officers regarding resource allocation and the way it impacted the performance of faculty and that of universities in general? I also addressed the following specific research questions which stood as sub-questions.

1. Why have universities in Zimbabwe developed in the way they have and what outcomes can we expect?
2. How are financial resources allocated from government and within state universities in Zimbabwe?
3. What are the respondents' perceptions on the way the current resource allocation methods impact teaching and research?
4. What are the strategies used by the staff to meet the needs of teaching and research?
5. How does the allocation of resources affect the long term success of a university?
6. What are the turnaround strategies that universities can adopt?

In this study, I made the following assumptions:

1. Time and adequate resources will be made available for the researcher to conduct the study.
2. There would be co-operation from respondents during data collection.

3. The participants selected had adequate understanding of the issues under investigation to be able to provide valid and reliable data for the study
4. Public universities in Zimbabwe had some form of resource allocation models that were in operation.

Delimitation of the study

The study focused on public universities in Zimbabwe. The targeted respondents were professors, senior university administrators and senior government officials from the ministries of Finance Economic Planning and Development and Higher and Tertiary Education. These persons were assumed to have the knowledge and information that would address the key research questions. The senior university administrators were identified because they play a key role in the allocation of resources. They also have knowledge of the university mission and the directions in which the institutions were poised to move. The government officers are responsible for the allocation of funds to the universities. Their perception of the university and its performance is important. They are also responsible for policy that affects higher education.

Limitations

Some limitations were imposed on the study because of time and financial constraints. I had to make some adjustments to the study in order to complete it within a reasonable period. For example, I had to limit my field work to six months although I could have done with more time. As a researcher, I was a full-time student living abroad and therefore time and money were constraints. As a

former senior administrator at a couple of the public universities I was aware that I was bringing my own biases into the investigation. In order to minimise my own biases, perceptions and opinions, I used some independent approaches for verifying data. For example, respondents were asked to check interview transcripts for accuracy and to provide me with feedback on the accuracy of my interpretations of the data.

Definition of Terms

While the generic meaning of the following terms may be clear to the reader, I still would like to define them within the context that I am using here. One of the key concepts that I discuss is *resource allocation* which in higher education is the process of deploying available human and other means among the sector's teaching, research and service. *Faculty performance* is defined as the level of productivity in teaching, research and service for the individual professors. It is measured by using defined performance indicators. On the other hand, *institutional performance* is measured by outputs from all departments. In this study I use the production model where *Inputs* are mainly the financial and human resources and the processes are teaching and research activities. *Outputs* are the products from the system and these are graduates and research publications. *Performance indicators* are used to measure the success or failure of an institution. Examples are the number of graduates per year, the dropout rates from programs, the number of research grants attracted by a department and many other indicators. Finally, an efficient system is defined as one, which enables

given outputs to be met at the lowest possible levels of inputs or cost. The *quality* of university education is a measure of the attainment of its stated objectives. This is a complex concept and which involves perceptions of various stakeholders, such as students, staff, employers, and the funding bodies, including the government.

Organization of the Thesis

Besides this introductory chapter, there are six other chapters in the thesis. Chapter Two presents the context of the research and highlights some political and socio-economic factors that have influenced the development of higher education. The issues discussed, that are critical are those of access, quality, equity and funding of a mass system of higher education in Zimbabwe. I make reference to select institutions for a detailed analysis of the development of university education.

Chapter Three presents a review of the related literature as well as discussions on the theoretical perspectives pertaining to the research. The study is underpinned by two models; the production model and institutional theory which are discussed at the beginning of the chapter. The rest of the chapter is devoted to reviewing literature on the performance of universities as institutions and that of individual faculty. There are several factors that influence performance, such as the role of government, the financing of institutions and the organizational culture found in the institutions. The chapter concludes with a synthesis of the conceptual framework used.

Chapter Four discusses the research methodology that I used in the study. There are details of the research design and the justification. The key methods used

in the study for collecting data are interviews and document analysis. The chapter also discusses various ways of ensuring the validity of the results.

Chapter Five consists of an analysis and interpretation of the data followed by a discussion. The data from the interviews are analysed using content analysis and the reports are presented as thick descriptive accounts. The chapter highlights emerging categories and themes from the interview transcripts. The results of document analysis are presented together with those from the interviews as a way of triangulating the evidence.

Chapter Six presents the major findings, conclusions and recommendations. The major findings include systemic problems such as an inefficient model of resource allocation. At the institutional level there were issues of inadequate resources, the "brain drain" and weak academic leadership. One of the key recommendations suggested is the development of a formula- based model of resource allocation which rewards performance.

Chapter Seven consists of my reflections on the study. In addition, the chapter presents implications of the study and outlines areas for future research. The chapter ends with a summary of conclusions to the dissertation. The chapter is followed immediately by a list of references and appendices pertinent to the research.

CHAPTER TWO

HIGHER EDUCATION IN ZIMBABWE

The Background

In Zimbabwe higher education refers to postsecondary institutions such as universities, polytechnics, teachers colleges, and other units in government ministries, government parastatal organizations and the private sector as well other non-governmental organizations. In this study the focus is on public universities. Before independence, higher education was divided as follows: Universities; Further Education Colleges, which included technical colleges and polytechnics; Teachers' Training Colleges and Agricultural Training, which came under the Ministry of Agriculture. It is important, in order to situate the study, to discuss briefly the context of higher education in Zimbabwe, before focussing on the question of resource allocation in universities.

Zimbabwe was a British colony from 1888 to 1965 and was formerly known as Southern Rhodesia. The country was part of a federation, which comprised of Northern Rhodesia (now Zambia) and Nyasaland (Malawi). Zimbabwe's higher education has to be discussed in the backdrop of a very complex historical, political and socio-economic development. Zimbabwe gained its political independence on 18 April, 1980. There was a war of liberation fought by two major Black movements, the Zimbabwe African National Union (ZANU) and The Zimbabwe African Peoples' Union (ZAPU). The war was started after Ian

Smith, the then Prime Minister of Rhodesia declared unilateral independence from Britain in 1965 and the illegal regime lasted for fifteen years. In 1980, a democratically elected government with a Black majority came into power after some protracted negotiations ending in the Lancaster conference in Britain, where some transitional arrangements were agreed to hand over power to the black majority. To a large extent, this political change later influenced the shape and development of higher education in the country through new policies.

Human Development

Higher education in Zimbabwe has been instrumental in skills development. The literacy rate in Zimbabwe is high, at 91.4 percent (UNESCO, 2009). For instance, the literacy levels of 15–24 year olds rose from 95 to 98% between 1992 and 1999 (UNDP, 2003). This is attributed to the emphasis put on education by government before and after independence. There has been unprecedented expansion of all education sectors since independence in 1980. However the gains in education are being undermined by other factors such as the "brain drain" and HIV/AIDS. Life expectancy is 40 years, which is low compared to countries of the "North." Other factors that have influenced the shape of higher education in Zimbabwe include rapid population growth. The country has a population growth equal to the world average of 1.1%., while the Sub-Saharan Africa has population growth rate of 2.2%, which

is double the world average (World Bank, 2000a). The growth rate for high-income countries is 0.3%, with Europe experiencing a negative growth of -1%. These statistics show that Africa has pressure from a young and growing population to consider in terms of access to education. The rapidly growing population has serious consequences on resources and this is evident in the burden that governments have in funding higher education. The rapid growth of population is likely to slow down due to the HIV/AIDS pandemic. The pandemic has had a heavy toll on the productive age range of 15–45 years. Any planning of higher education has to take into account the effects of HIV/AIDS, which is likely to reverse the gains to date in development. There are already signs of stress in the higher education sector as a result of HIV/AIDS mortality and morbidity of students and parents.

Another factor in human development has been the "brain drain." One of the benefits of the massive brain drain, or emigration of intellectuals from Zimbabwe, has been the remittances in foreign currency back into the country. To a large extent the near collapse of the Zimbabwean economy has been averted by financial support from families abroad. Although the brain drain means people are not using their skills for the benefit of their own country, indirectly the country is benefiting from foreign currency inflows. What is apparent is that Zimbabwe has become a human resources training ground for other countries. The quantitative gains in education made since independence, in 1980, have

not been used optimally to the benefit of Zimbabwe has been affected by brain drain due to poor salaries and unattractive working conditions.

The Economy

The Zimbabwean economy is on the brink of collapse with formal employment estimated to be between 5% and 10%. Unemployment has been getting worse since the early 2000s. The World Bank (2005) reported that 81.8 % of the secondary school leavers in Zimbabwe were unemployed in the period 1999 to 2001. Inflation reached unprecedented levels over the past few years. It was 164 900 percent in February 2008 (Central Statistics Office, 2008). In January 2009, Z$ 100,000,000,000 were equivalent to US$ 2.5. The country is facing some of the greatest challenges in development due to this economic meltdown. Many people have left the country as economic refugees. They have gone to neighbouring countries such as Botswana and South Africa. Others have gone overseas, to the United Kingdom, Canada and the United States among the popular destinations. Zimbabwe is naturally endowed with agricultural land, minerals and wild life. It has the potential to develop successfully given the natural and human resources as well as technology. Zimbabwe was the bread-basket of the Southern African region, being self-sufficient and a net exporter of food. The economy experienced negative growth in the period 1998 to 2000. This was caused by a number

of factors, such as prolonged droughts, hyperinflation and a critical shortage of foreign exchange.

The country tried a number of policy changes in order to turn around the economy, starting with the Economic Structural Adjustment (ESAP) program (Government of Zimbabwe, 1991. However the economy continued to decline. As result the government has been finding it difficult to provide all the funding required in higher education and other sectors. Yet the demand for higher education has increased tremendously in the last decade. The expenditure per student in Zimbabwe tertiary education is over 300% of GNP per capita, yet for primary education, it is only 19% of GNP per capita (World Bank, 2000a). This phenomenon is a result of the rapid expansion of the university sector, which began in 1999. The expansion is demand led.

In Zimbabwe, the participation rates at tertiary level of 4% remain low compared to the high-income countries, where the average rate is over 60%. However, the World Bank (2000a) also shows that, in Zimbabwe, 24 % of all tertiary students are in Science and Technology. This figure compares very well with the average of 25% in the high-income countries. Table 1 below, illustrates the fact that there is a wide gap, in terms of access to tertiary education, despite higher public expenditure by African countries compared to the countries of the "North." It is noted that Zimbabwe is spending a greater proportion of its revenues on higher education.

Table 1: Participation in Tertiary Education: Select Countries

	Enrolment Ratio as % of the relevant age group	Expenditure per student as % of GDP per capita
Botswana	5	90.5
Kenya	3	*
Zimbabwe	4	201.3
South Africa	15	53.2
Australia	48	25.4
Canada	58	48.2
US	81	31.7
UK	64	23.2

* data unavailable

Source: World Development Indicators, 2007

Note: Gross enrolment ratio is the total enrolment, regardless of age, to the population of the age group that officially corresponds to the level of education. of the national income on higher education. One explanation for such large public expenditure is the low level of tuition fees charged by the institutions.

The Policy Environment

Higher Education policy development in Zimbabwe has been very complex. There are many factors that have influenced the policies. These include political, historical, sociological and economic aspects as well as current forces of globalisation. In analysing these factors there are colonial and postcolonial influences to be taken into consideration. At the time of independence in 1980, Zimbabwe's policies were very much shaped by Scientific Socialism. This was a natural choice, given the fact that the war of independence was for the eradication of a capitalist society whose pillars were based on race. The new government was seeking social equity and the redistribution of resources to achieve its goals. The government had great challenges to redress the past. In education the major policies taken were to widen access. The second challenge was to fill the skills gap caused by the exodus of Whites. Many Whites left the country just before independence in 1980 and continued to emigrate well after independence. The government therefore wanted to train indigenous people to improve the local labour market.

In reviewing the Transitional National Development Plan (1983), it is noted that government policies in education focussed on both quantity and quality. The National development plan states,

> *Government recognizes that education is a basic human right. It also recognizes that education is an investment in human capital, which sustains and accelerates the rate of economic growth and*

socio-economic development. The challenge for Zimbabwe is not only one of redressing the educational qualitative and quantitative imbalances in the inherited system but also that of meeting the exceedingly large demands with limited resources (p. 27).

It is resource constraints that have largely dictated the developments in education. Quality seems to have been relegated to lower priorities as events unfolded. Riddell (1998) stated that, political demands of many newly developing countries in the 1960s led to the quantitative expansion of education. This was mainly because earlier educational systems had been designed only for those intended to enter colonial administration. There was an assumption that tackling the quantitative expansion first would be followed by qualitative improvements. In its report, the Williams' Commission (1989) observes that quality should not be compromised by rapid expansion despite the need for widening access and reported that,

Our first main concern is that the necessary expansion should not be at the expense of quality, and that the new institutions and programmes which we suggest Zimbabwe should now establish should be of a high standard, but we also regard it as crucial to ensure that in a proper enthusiasm for creating new structures and institutions, the authorities do not overlook the current needs of existing institutions or neglect to strengthen and consolidate what is already in place (Williams' Commission Report p. 29).

The Commission received evidence suggesting that expansion might erode the existing gains and its anxiety was that the resources would be spread too thinly to cover more institutions. In a later report, the Nziramasanga Commission (1999) reported that the government policies to have free education were not sustainable. At independence in 1980, the government declared all primary education free. The result was a dramatic increase in enrolments at all levels including the postsecondary level. By the early 1990s the government found itself faced with a huge budget for the provision of books, construction of buildings and for the training and salaries of teachers. It had to back-track and allow for the implementation of school levies, which is another form of school fees. The high costs of education were also evident at secondary and tertiary levels. The Nziramasanga Commission recommended the introduction of cost recovery methods. This thinking was influenced by world trends and was in tandem with World Bank policies on financing education. Over the years as the funding situation became more burdensome, the government started looking at other options such as the private sector, introducing full tuition fees and increases in the loan component. The increase in the loan component was meant to create a revolving fund. The charging of fees was important but this was going to be difficult for parents in the current economic environment. More recently the economic policies have been

shifting from Scientific Socialism to Capitalism, when the government embarked on economic structural adjustment programs.

The government abandoned its Socialist ideology in the period 1991-1995, in favour of the Economic Structural Adjustment Programmes (ESAP) in order to access funds from the World Bank (Government of Zimbabwe, 1991). It sidelined its own national development plan in the process. However, the decade of the 1990s witnessed a turnaround of economic fortunes, as economic decline set in and structural problems of high poverty and inequality persisted. The government tried to explain the causes of decline using recurring droughts and floods, as well as, the non-realization of the objectives of the economic structural adjustment program (ESAP). During the period between 1991 and 1995, real GDP growth averaged about 1.5% per year. The period 1996-2003 was marked by accelerated deterioration in the socio-economic situation. The Government replaced ESAP with a "home-grown" reform package the *Zimbabwe Program for Economic and Social Transformation (ZIMPREST)* in April 1998. However, the lack of resources to implement this reform package undermined its effective implementation. In another attempt to address the declining economic performance, the *Millennium Economic Recovery Program (MERP)* was launched in August 2001 as a short-term 18-month economic recovery program. Its objective was to restore economic vibrancy and address the underlying macroeconomic

fundamentals. Unfortunately, MERP was also rendered ineffective largely due to the withdrawal of the international donor community.

In February 2003, Government launched a 12-month stabilization program the *National Economic Revival Program (NERP): Measures to Address the Current Challenges* (Government of Zimbabwe, 2003) while considering options for long term economic recovery. Though NERP was received with more optimism by donors, the private sector and other stakeholders, more than half-way through its implementation, the program did not generate the foreign currency required to support economic recovery.

Chapman and Austin (2002) observe that, "there is a general tension and sometimes a direct trade-off between the political necessity to expand enrolments, the moral imperative to increase equity, the educational desire to raise quality and the overwhelming need to control costs" (p. 4). The current policy environment in Zimbabwe is very fluid because of the turbulent economic and political situation. Pal (2006) said, "Policy to put it simply, comes from those who have legitimate authority to impose normative guidelines for action. In a democracy policy is made by elected officials in concert with advisors from higher levels of the administration." (p. 6)

Long term policy documentation in Zimbabwe has become rare because of unstable environment. More often policy is just announced by government ministers and the president as well as other senior government

officials. This situation is further complicated by contradictions, retractions and revisions that take place very frequently.

The government has emphasized wider access at the tertiary level contrary to policies by the World Bank. Most African governments are opposed to the Bank's policies on tertiary education (Banya & Elu, 2001). The Bank is known to have held policies that have perpetuated neglect of higher education in Sub-Saharan Africa, because of the belief that primary and secondary education was more important for development. This belief was based on studies on returns from investment in education which tended to show that such investment had better returns from primary and secondary education compared with higher education (Psacharopoulos & Patrinos, 2002). In their study of 98 countries from 1960-1967, they estimated that the rate of return from primary schooling was 18.9 % while that for tertiary education was just 10.8 %. A weakness in their cost-benefit analysis is that the calculations of the individual benefits for higher graduates include future income while the calculations for Basic Education do not compute that variable.

From 1985 to 1989, 17 % of the Bank's worldwide education sector spending was on higher education. However from 1995 to 1999 only 7 % percent was allocated to this sector. Bloom et al. (2006) observed that tertiary education could lift Africa out of its problems of development. This was a shift from past studies by contributors to the World Bank, which emphasised primary and secondary education. The premise of their

argument was that, African countries would benefit from technological catch-up and thereby increase their ability to maximize economic output. Investment in tertiary education in Africa may accelerate technological diffusion. This development would decrease knowledge gaps and help reduce poverty in the region. Bloom et al were cognisant of the influence of other factors such as sensible macroeconomic management

Governance

The public universities in Zimbabwe have held considerable autonomy. The universities have been governed by Councils appointed in terms established by Acts of Parliament, for example, the National University of Science and Technology Act, 1990. The Councils were given executive authority on policy-making but delegate day to day running of the institutions the Vice chancellor and his management team. The University Senate consisting of academic staff and chaired by the vice-chancellor or the deputy has oversight on academic policies and their operation. The Council and Senate are supported by a plethora of committees and sub-committees. The system is meant to ensure democracy and full participation of all its staff members and students. Faculties are managed by elected Deans and departments are headed by chairpersons appointed by the Vice-Chancellor in consultation with the academic members of staff of the department concerned and the relevant Dean.

The Ministry of Higher Education has a coordinating role in the areas of financial resource allocation from government. In 2006, the Council for Higher Education was being revamped to play a more active role in the monitoring of quality. The new Act, for the Council of Higher Education (2006) was aimed at giving the central body some control on quality in higher education. It will be some time before results can be expected from this body because of financial and human resource limitations. The 2006 Act, stated that, in searching for a model of quality assurance, certain minimum standards were expected in the following areas,

1. Curriculum design, content and organisation
2. Teaching, learning and assessment
3. Student progression and achievement
4. Student support and Guidance
5. Learning Resources
6. Quality Assurance and enhancement

(Council for Higher Education Act, p. 5)

Until 2010, the universities have had full autonomy on issues of quality while the other tertiary institutions have to account for quality through the Ministry of Higher Education mechanisms. Quality in higher education has been a major challenge (Kariwo, 2007). There has been a decentralised system for quality assurance in universities, each of which

have used their own methods. The situation is changing with the new Council for higher education act, which seeks to empower the council in matters of quality in universities.

Quality control and assessment in universities has been largely left with the individual institutions. In the period 1957 to 1991, when the University of Zimbabwe was the only university in the country, it used a combination of quality control methods which included:

1. setting minimum entry points for selected students.
2. use of external examiners.
3. Senate was charged with ensuring that programmes met required standards as well as ensuring that examination results were processed and published strictly according to the regulations and procedures.

All the public universities in the country have since adopted this system of quality assurance which is by and large internal. However, due to a shortage of foreign currency and other factors, not many external examiners have managed to be physically present in the country to have direct contact with departments and lecturers as part of the their evaluation. With so many new universities, it may be necessary to complement the efforts of internal mechanisms with external ones. In that respect the new role of the Council for higher education should be crucial.

Financing Higher Education

Public universities in Zimbabwe are funded by government from the fiscus. The government's contribution constitutes nearly 95% of the

recurrent expenditure and 100 percent of the capital expenditure. Five percent of the recurrent expenditure comes from tuition fees and other income generating activities, as well as from donors and the private sector. The government, therefore, is a major stakeholder in terms of financing university education. Before independence and in the early post independence years, some of the capital expenditure came from donors. For example, some buildings at the University of Zimbabwe were built with the funds from the Beit Trust and the School of Veterinary Science was built from EEC funds.

The role of donors in education has been reduced tremendously over the years since independence. Donors played a significant part during the first decade after independence in a spirit of reconciliation and reconstruction. However, due to the current political climate, the image of the country is such that donors have been less willing to make contributions. The main areas where donors made an input were in research and manpower development. The staff development programme at the University of Zimbabwe is an example. The main donors have been the Rockfeller Foundation, the Kellog Foundation, the Canadian International Development Agency (CIDA) and Swedish International Development Agency (SIDA) and the British Overseas Development Agency. There were other contributions from Germany, Australia and New Zealand. While Aid was on a government to government basis, there were projects funded by individual

organizations, some of which were religious based. Only in a few incidents, were donors interested in capital development.

The private sector has made some contribution to financing education in public institutions through the Zimbabwe ZIMDEF and direct sponsorship at the institutions. There is scope for increasing the contributions from this sector and therefore this is one area where institutions can establish new partnerships. The private sector has however been supporting education mainly in the area of skills training through short courses. It has made scholarships available to students at public institutions who are likely to join the private sector labour market.

There has been a shift in the funding policies for higher education as indicated in the 2009 Budget Statement. The Minister of Finance highlighted the need to spread the burden of financing higher education by increasing cost sharing. He said,

> *Mr Speaker Sir, the expenditure requirements to restore quality education in our tertiary institutions make it unavoidable that Government shares some of the costs of tertiary education with the parents. This also improves accountability among students in universities, polytechnics and colleges as well as ownership of the institutions' facilities. Honourable Members will have noted the many instances where, surprisingly, even well endowed parents display inability to pay tertiary education fees when they were able*

to get their children through ordinary and advanced level education without State assistance. (2009 Budget Speech, p. 121)

He went on to state the new policy on tuition fees:

Government has, therefore, approved the tuition fees and levies for State Universities, Polytechnics and Teachers Colleges payable in both local and foreign currency. The fees schedules were determined on the principles of cost sharing, the need to ensure access and equity, the need to retain critical staff in institutions of higher learning, the need to promote quality education and finally the need to restore Zimbabwe's leading position in the area of education and training. To this end, institutions are required to embark on revenue generating projects and activities such as applied research and full utilisation of land as well as other resources allocated to them. The intended impact would be improved quality of education, student welfare and discipline and refurbishment of infrastructure and staff motivation and retention. (2009 Budget Speech, p. 122)

He also reported that, the approved fee-structures would yield additional funds that will be used to top-up retention allowances of staff involved in tertiary education. However staff would continue to receive their basic pay from the government. One of the problems in the current system of funding was that students who could afford to pay fees were still

benefitting from the government loans due to poor screening by the Ministry officials. The new policy was intended to solve this problem and to ensure access and equity. Students at State tertiary institutions, unable to pay fees from their own means, would be considered for support under the Cadetship Program, implemented through the respective ministries and government departments. The Minister said that the government had put in place the necessary means-testing mechanisms, drawing on input from both primary and secondary school authorities in order to improve the reliability of assessments of targeted vulnerable students.

Development of University Education

Public Universities

There are now nine public universities with a total enrolment of about 36000 fulltime students. This is a decrease in enrolment after a peak of nearly 50000 students in 2006 (Table 1). There are many reasons that explain this decline. Firstly, the government introduced tuition fees as a cost sharing measure from 2002, although the actual implementation took time. Secondly, there has been increasing student exodus to neighbouring countries as the perceived quality of university education has been declining. However, only those students who could afford international tuition fees in the countries of destination were leaving. Thirdly, the government has now a policy requiring students to pay fees in US dollars, after the collapse of the local currency in 2009.

A brief discussion of some examples of the public universities is necessary to highlight policy issues relative to the expansion of university education. I have selected the University of Zimbabwe which is the oldest and the largest. In addition I examine one large Science and Technology university and lastly the Open University because of the very different concepts in this model. The public universities in Zimbabwe can be classified as comprehensive, (i.e., offering programs that cover the humanities, natural sciences, engineering and medicine), or they may be categorized as technological. There are other universities that have had a special origin. Examples of comprehensive institutions (Kariwo, 2008) are the University of Zimbabwe, Midlands State University and the Zimbabwe Open University. Technological universities include; the National University of Science and Technology, the Chinhoyi University of Technology and the Harare Institute of Technology.

TABLE 1: ENROLMENTS AT PUBLIC UNIVERSITIES

Name of University	**2004**	**2005**	**2006**	**2007**
Bindura University of Science Education	725	1056	1056	1643
Chinhoyi University of Technology	1672	1596	2286	3287
Great Zimbabwe	15562	1562	2303	2665
Harare Institute of Technology			*	141
Lupane University			*	*
Midlands State University	660	1613	10055	2655
National University of Science and Technology	3594	3594	3594	1933
Zimbabwe Open University	10518	18678	18307	17246
University of Zimbabwe	18701	12266	12098	11484
Total	36838	40365	49699	36456

Source: Ministry of Higher Education. 2009

Notes * No data available from new universities

There are other universities, such the Bindura University of Science Education specializing in the training of science teachers and the Lupane State University, with a focus on agriculture. The Great Zimbabwe

University is one of the universities established after the Chetsanga report (1995), which recommended the devolution of the training of teachers to colleges that were subsequently upgraded to university status.

Universities in Zimbabwe have tended to have a colonial approach to the design and mission (Chideya, 1991, Kamba, 1985). Like in many former British colonies, these institutions were a mirror of those institutions found in the metropolis of the colonising country. The University of Zimbabwe, for instance, is a product of the Asquith Commission. It was the first public university to be established in the capital city, then, known as Salisbury, (now Harare). It was established in 1957. The university was a joint venture of Southern Rhodesia, Northern Rhodesia and Nyasaland, during the federation. Its origins are explained by both initiatives from Britain, which was the colonizing country and local interests in university education from white business men. In the first case the British government was concerned about the provision of higher education for Blacks in the three territories of Central Africa, namely, Southern Rhodesia (Zimbabwe), Northern Rhodesia (Zambia) and Nyasaland (Malawi).

Some white businessmen formed an association which lobbied and eventually presented a bill in the Southern Rhodesia parliament to establish a board which was later to lead the formation of the university in Harare. The aim was to satisfy training needs for whites in areas such as Accountancy, Business Studies, Social Sciences, Agriculture and

Engineering. These programs were intended to provide skills for mainly whites who were expecting jobs in the white dominated economy.

The University College of Rhodesia and Nyasaland received its Royal Charter on February 10, 1955; however admission of the first 68 students was in 1957. The University College of Rhodesia and Nyasaland started with three faculties namely, the Faculty of Education, the Faculty of Arts, and the Faculty of Sciences. In 1963 the school of Medicine was built and had a special relationship with the University of Birmingham. The successful medical graduates from the University College in Harare were awarded the University of Birmingham degrees. The rest of the graduates were awarded the University of London degrees. The Faculty of Engineering was established in 1974 while the Faculties of Agriculture, Commerce, and Law followed in 1980. To date the university has ten faculties following the establishment of the Faculties of Social Studies and the Veterinary Science.

For many years the University of Zimbabwe served as the only public university producing highly skilled personnel for the whole economy. Although created from a multiracial charter, the admission of Blacks was very limited. At independence there were about 200 Blacks out of a total enrolment of about 2000 fulltime students. One of the major policy changes after independence was not only to increase the percentage of Blacks enrolled at the institution but to widen access in higher education in general.

The University of Zimbabwe is a product of the Asquith Commission (Maravanyika, 1990). In 1990, the government appointed a commission of Inquiry to investigate the establishment of a second campus or university, under the chairmanship of Professor Peter Williams, head of the Higher Education Division of the Commonwealth Secretariat. This was in the backdrop of reports on pressure for places and overcrowding at the University of Zimbabwe. This report culminated in the establishment of the second public university located in the second largest city, Bulawayo. This was to be called the National University of Science and Technology and has a strong bias in Science and Technology. At the time when the National University of Science and Technology was planned there was a wave in Africa about science and technology being the way to development. The university was to have a capacity of 10,000 fulltime students. One major consideration in the course offerings was that there would be minimum duplication with the university in Harare. The university introduced programs in Architecture, Water Engineering, Textile Technology and in the Faculty of Commerce, new degrees such as Banking, Finance and Insurance were started. In the Sciences, emphasis was placed in the applied nature of the disciplines. Another innovation in the programs, at the new university, was the inclusion of a year of industrial placements, normally in the penultimate year of study, to enable students to gain "hands on" experience before completing their degrees.

The university started with an enrolment of 270 fulltime students in 1991, which grew to 4000 in 2004.

Realizing the need to expand university education the government went on to establish more public universities beginning in 1997. The Zimbabwe Open University (ZOU) is one of the key institutions in the country undertaking university Continuing Education. Kariwo (2009) observed the important contribution to widening access in higher education in Zimbabwe made by ZOU. It is the only university in the country that uses the distance mode of delivery. Its enrolment figures are 50 percent of the total university enrolments. The institution went through rapid growth, since its establishment in 1998.

TABLE 3: THE ZIMBABWE OPEN UNIVERSITY ENROLMENTS

	2002	2003	2004	2005	2006	2007
Males	8149	11824	7345	*	10949	10175
Females	5687	7404	3173	*	7358	7071
Total	13836	19228	10518	18824	18307	17246

* Missing data

Source: Ministry of Higher Education, 2009

The Zimbabwe Open University has its origins from the Center for Distance Education, at the University of Zimbabwe which was established In 1996 the Center for Distance Education became the University College

of Distance Education. Three years later, on 1 March 1999, the College became the Zimbabwe Open University. It consists of the following ten centers: Bulawayo, Harare, Manicaland, Mashonaland Central, Mashonaland East, Mashonaland West, Matabeleland North, Matabeleland South, Masvingo and Midlands regions. There are three faculties awarding a range of degrees. (See appendix I). The idea behind such a distribution of centres was to ensure there was access to higher education in all the provinces. Kurasha (2007) in her defence of the only open-university in Zimbabwe argues for brain gain using distance education. She observes that this mode of delivery is cost effective and is accessible to all who missed the face-to-face delivery mode. The main thrust of her argument is that distance education promotes lifelong learning. However, she also emphasises the need for meeting the professional needs of workers in consultation with industry.

Finally, not all students who need access to university education gain admission therefore the "Virtual University" has a definite role to play in increasing access. There are two sites of the African Virtual University, one at the University of Zimbabwe and the other at the National University of Science and Technology in Bulawayo. The African Virtual University was piloted by the World Bank.

Private Universities

The contribution by private universities is very small, both in student enrolments (Table 4) and program offerings, yet there is so much hope that

these institutions could provide a solution to the current demand for higher education. The disciplines are concentrated in the humanities. While the contribution of private universities is growing, at the moment it is far less than that from the state universities. The private universities in Zimbabwe are mainly supported by church foundations and charge 'full cost' fees. The difference with other countries is that students from private universities are supported by loans from government. Therefore, the state is still making a contribution in private universities by providing soft loans to students. Private universities make a substantial contribution to the capital investment. Thus at the system level they play a major role. The private universities, which originally started in order to provide higher education in a religious environment, have found themselves filling a gap where state universities could not satisfy demand.

Rethinking Zimbabwean Higher Education

At independence in 1980, there were calls for making university education relevant to the needs of the country. The role of the university had to change from serving mainly white interests to addressing issues of national development given the challenges of transforming what was then white dominated economy. The concept of a university in Zimbabwe had to be redefined. Prior to independence the ethos of a university had been based on euro-centric perspectives. The first Black Vice-Chancellor of the University of Zimbabwe, Walter Kamba, in response to the challenge of

TABLE 4: ENROLMENTS AT PRIVATE UNIVERSITIES

Name of University	**2004**	**2005**	**2006**	**2007**
Africa University	828	1155	1275	1284
Catholic University	313	313	313	313
Great Zimbabwe	832	0	111	2655
Women's University in Africa	537	524	862	524
Solusi University	1927	1927	1877	1877
Total	4437	3919	4438	6653

Source: Ministry of Higher Education

transforming the University of Zimbabwe stated, "I regard the University of Zimbabwe as first and foremost a developmental university, which is singularly animated and concerned, theoretically and practically with the search for solutions to the concrete problems of national development." (Kamba, 1982, p. 57)

Africa's history is one of colonial eras when various powers dominated the continent and thereby made inputs of their own cultures and

civilization until the independence of these countries. It is therefore not surprising that the type of pre-independence university found in a country has a close resemblance or is a remnant of the colonizing country's model(s). As noted earlier, the Zimbabwean state universities are very much modeled along the lines of British universities. This is because when the University College of Southern Rhodesia and Nyasaland started, the Asquith Commission in 1945 recommended that a special relationship be established between the college and the University of London in the United Kingdom, whose degrees the new college was required to offer. Thus, for many years, the University of Rhodesia and Nyasaland offered London degrees. Kariwo (2008) observes the key role of higher education in national development. He suggested that African universities need to focus on relevance as one way of creating an "African" university. This could be done by designing relevant curricula. Universities should focus on research that addresses the needs of the societies which they serve. Africa has problems of shelter, droughts, disease, energy and many other pressing issues, yet one finds departments that devote more time to what may be classified as "esoteric" research of the ivory tower. I revisit this concept later when I discuss my reflections on the study and the re-conceptualization of funding Zimbabwean higher education.

In the next chapter I discuss the relevant literature which I reviewed for the study.

CHAPTER THREE

REVIEW OF RELATED LITERATURE AND THEORETICAL ANALYSIS

Institutional Theory

I used Institutional theory, as a framework for my study because I am looking for perspectives that can explain change in an organization. For universities in sub-Saharan Africa, this has to be radical change in order to address the prevailing crisis in higher education. My research is on the impact of resources on the performance of universities. One of the issues I examined was how institutions could improve their situation faced by a situation of economic decline. Institutional theory (Meyer & Rowan, 1977; Powell & DiMaggio, 1991) is useful in explaining the process by which legitimated forms of organizing become dominant within an organizational field. The data analysis, for example, will be guided by Institutional theory. Institutional theory, states that organizations are influenced by three main factors namely, the regulatory frame, the normative structures and the cognitive structures (Di Maggio & Powell, 1983; Powell & DiMaggio, 1991; Scott, 2001, 2003). This theoretical framework tries to explain why and how and to what extent institutions in their development and missions no longer correspond to the original dimensions

There are new forms of institutional theory and old forms (DiMaggio & Powell, 1991; Greenwood & Hinnings, 1996). The new forms focus on conformity and isomorphism. On the other hand, the Resource

Dependency theory states that most organizations confront numerous and frequently incompatible demands from a variety of external actors (Pfeffer & Salanchik, 1978). There is a tendency therefore for an organization to be under external pressures because of the dependency on resources. Finally using the Production Model enables me to address the issues of efficiency that are so pronounced in the literature (Blair, 1997).

I wanted to examine how best practice in institutions' resource allocation processes can be used to improve the performance of these institutions. I also want to see what policies can be put in place to arrest decline. My literature review has led me to question the viability of some aspects of Institutional theory such as the mimic mode. Logics are seen increasingly as an effective methodology to explain the way to manage strategy. This is in the midst of an array of other theories such as the Stakeholder theory. Institutional theory comes from the work of DiMaggio and Powell (1983) Meyer and Scott (1983). Their work focused on organizations as natural systems that were open. In this perspective regulatory and normative frameworks are viewed as key components of an organization's institutional environment. Work by Meyer and Scott introduced another concept on institutionalism, which focused on the cognitive concept. In this approach, concepts such as rationality, self-interest and efficiency are viewed as ideological. This view contrasted with an earlier view that organizations were closed systems that were

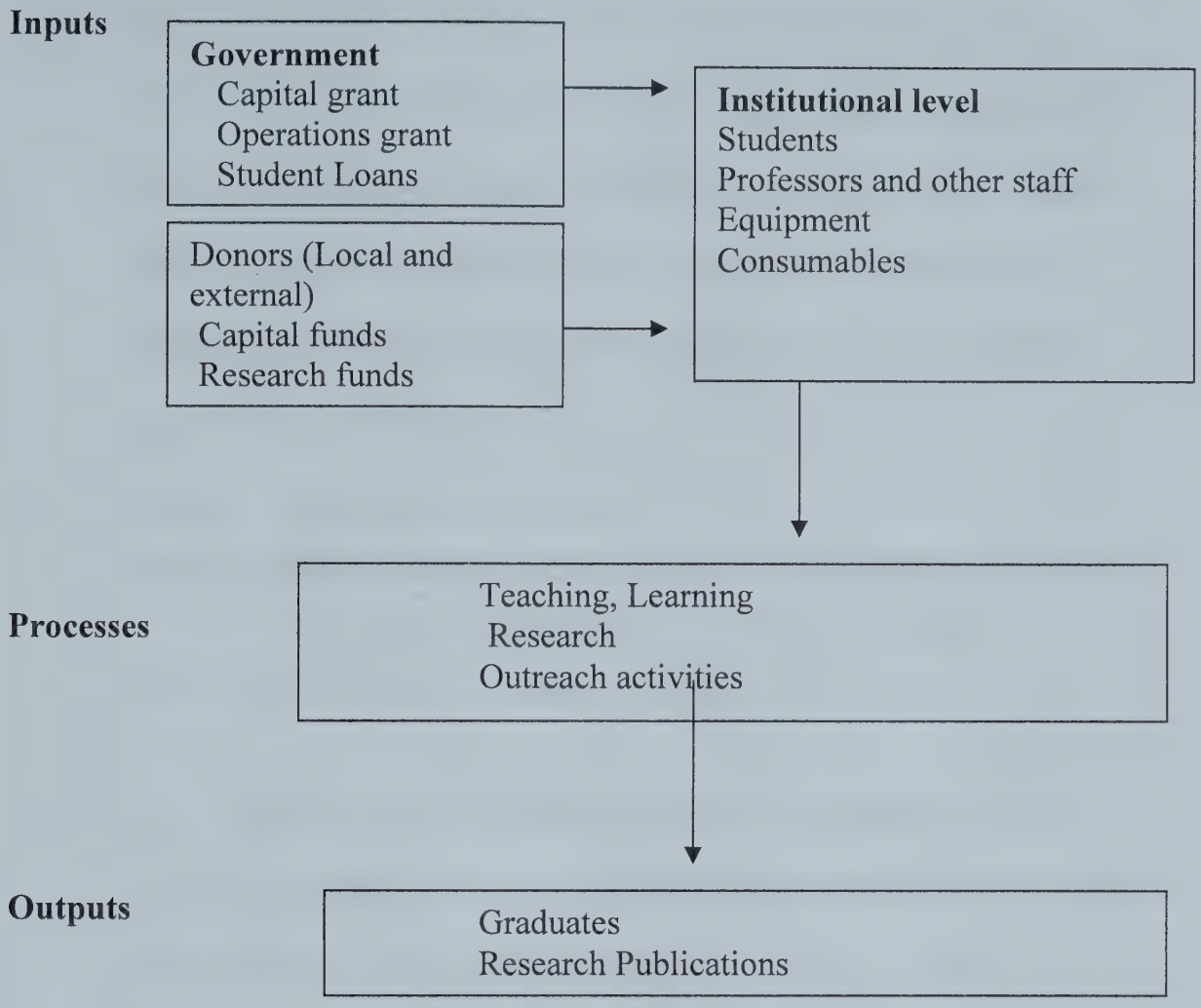
primarily concerned with technical efficiency (Woodward, 1965). In this sense using the production model can easily be justified.

The Production Model

Belfield and Thomas (2000) used the production model when they investigated the relationship between resources and performance. They considered inputs and outputs in an education system and state that the difference between industrial firms and colleges is that inputs and outputs in a firm are easier to measure. While in colleges one can measure inputs from total expenditure, it is very difficult to measure the output. It is easy to use graduation figures and publications but these do not show "value added" in the process of teaching and research. Belfield and Thomas also highlight the problems of including academic scores, student expectations and future earnings as outcomes to be measured.

Gobbel-Dreyling (2003) refer to such output indicators as the number of PhDs, awarded, the number of new publications and the amount of external funding acquired. The use of research publications is not without its problems such as how many and of what quality. Also much depends with the concerned disciplines. Both the production model and Institutional theory have their strengths and weaknesses but they are compatible as research methodology in this study which is looking at the way institutions behave and the possibilities of change.

FIGURE II: INPUTS AND OUTPUTS IN HIGHER EDUCATION



SOURCE: Adapted from Cave, Hanney and Kogan (1991)

This study is based on a conceptual framework that makes use of the production model. Cave Kogan and Maurice (1991) state that, "Historically, a number of techniques have been used to appraise the efficiency of public institutions in general. They involve establishing some relationship between inputs and outputs." p. 26

The study employs the production model of inputs and outputs to determine the impact of resource allocation and utilization on the

performance of a university. By using this approach, higher education, is taken as a process in a conceptual framework where inputs, such as students and academics time, equipment and buildings are transformed into outputs, which are the graduates and research publications. Figure II, indicates points in the process where measurements can be made in financial terms and the results can be used to check performance and impact. These points are,

Stage one – inputs -the resources used
Stage two - the processes in higher education, such as teaching research
In this stage the inputs are converted into outputs.
Stage three - the outputs – research and qualified workforce

The major inputs into higher education in Zimbabwe include financial resources, buildings and plant infrastructure, such as laboratories and teaching equipment; human resources, i.e. staff and students.

The above theories may have their shortcomings but they are useful as a theoretical framework in research. They complement each other rather than create tensions between the perspectives. In discussing Institutional theory and the production model which form my main theoretical framework I also make reference to the Resource Dependency theory. Resource dependence, according to Oliver (1991), is a relationship where one organization is associated with another for fiscal, social or political need. In terms of my study the relationship with government is very strong for both political and fiscal reasons. I also argue that

Institutional theory is such a diverse multiplicity of perspectives consisting of old and new forms. As such, much depends on the researcher's orientation and bias as to which forms will dominate their theoretical frame. In this study, I emphasized those strands that explain change, may be even radical change and the efficient management of organizations. I was specifically looking for ways of explaining turn-around strategies for the declining universities in Sub-Saharan Africa.

LITERATURE REVIEW

The review of related literature focused on the main research question, which was, "What were the perceptions of university staff and senior government officers regarding resource allocation and the way it impacted the performance of faculty and that of universities in general." Many universities have standard procedures for measuring performance. In research for example, some institutions consider the number of publications in refereed or non-refereed journals. There are arguments as to whether the criteria are subjective or objective. Performance in teaching is more difficult to measure. Some institutions use student evaluations. There are arguments for and against the use of student evaluations. It is essential that the performance indicators be articulated for evaluation instruments to be reliable and valid. Despite the shortcomings, these methods of evaluating faculty are in use even in Zimbabwean universities.

Writings in this area in Zimbabwe are limited and as such, I will depend on the few that have been published.

Leifner (2003) analyzed forms of resource allocation in university systems from different countries to find out how they affect performance. He used case studies from the United States, United Kingdom and Europe. He considered the allocation methods at the macro level, being the government level and the micro level being the individual institution. He established that performance-based methods tend to bring about positive change. He observed that the level of funding influences the type and level of activity that faculty engage in. There were also some unintended side effects. This investigation is important in that the results show that there is some link between resources and performance of faculty. However considering how resources influenced the success of a university, Leifner observed that other factors were perceived to be more important. For instance the quality of academic staff and students was ranked higher. Resources and other incentives came much lower than university culture. Leifner's study was done in advanced countries where basic resources are available. This study would probably produce different results in Zimbabwe where the minimum resource levels are inadequate. Leifner's findings would hold true where there is a minimum threshold of resources.

Leifner concluded that the most critical factor is good lecturers. The study failed to recognize that there needs to be a minimum threshold in resources, for a university to operate reasonably successfully. My

argument is that most African universities operate below this threshold and therefore resource allocation is a central issue to the successful performance of the institutions. In Leifners' study student ability is also ranked higher than university culture and form of resource allocation. He argued that performance based funding is more effective in improving the performance of universities. Evidence shows that in practice performance funding is not a pure form of resource allocation but that it is combined in many instances with other forms such as input based funding where universities are funded on the basis of numbers of students enrolled. Jongbloed and Vossensteyn (2001) Burke and Modarresi (2000) observed that performance funding is popular but has practical implementation problems. This claim was made after Burke and Modarressi investigated the use of performance indicators in some states in the US, some of which used performance funding and others that had stopped using it.

Belfield and Thomas (2000) in a study done on Further Education colleges in England, observe that there is no evident positive link between unit resource levels and performance but rather that there is a link between size and performance. This is because larger institutions achieve economies of scale. Their findings, however, raise questions of how quality can be achieved in larger departments. They argue that searching for a link between resources and outcomes is important because of the large amounts of investment in higher education by governments. It is

therefore, necessary to monitor the rising costs and improvement in the sector. For Zimbabwe, the impact of reduced funding would be the inverse argument. There are also policy implications such as investment versus returns. Naturally government would want the highest returns for any investment. However if a link between resources and performance is not obvious, then it becomes more difficult for universities to claim more funding.

In another study Callahan (2007) observed that lack of clarity from government can be a limiting factor in achieving goals at the national, community and institutional levels. In Zimbabwe the ministry of higher education strategic plan does not give a firm direction and vision for the universities. While it detailed expansion and capital investment, there is little information on the coordination of programmes and overall priorities that universities should aim to encompass in their individual mandates.

Burke and Modarresi (2000) observed that performance funding tightly ties state allocations to prescribed levels of campus achievement on designated indicators. They claim that performance funding adds institutional performance to the input factors traditionally used in state budgeting. States had previously provided front-end funding to encourage desired activities whereas in performance funding the focus is on results.

Government-University Relationships

The state assures the functioning of universities by providing them a considerable proportion of their total funding. Weiler (2000) observed that in most countries of the world, including the USA, most higher education institutions that are entirely funded from private sources are simply not feasible anymore. He cites the US as having the most developed and successful system of private higher education, but that it has since moved to a hybrid situation where private institutions cover an ever increasing share of their costs from public funds, just as public universities draw increasingly on private sources of funding.

Kariwo (2007) observed that the role of government in higher education in Zimbabwe can be described as "state supervision" (Neave & van Vught, 1991). In this model, the state plays a major role in providing funds for education. It also gives direction on policy through the Minister of Higher Education. The universities enjoy a good deal of autonomy and academic freedom compared to the European system. They determine the curricula and hire the staff who teach and conduct research without the interference of government. The government has indirect control of the institutions. It is represented on the university councils where institutional policy is discussed. The only area where government has some form of direct control is through the appointment of the senior officers such as the Vice Chancellor, Pro-Vice Chancellor and Registrar. Even in this function, the government consults the University Councils before an appointment is

made. When one compares the relationship between the state and universities in other parts of the world, one can conclude that the government's role in higher education in Zimbabwe is, in fact, laissez-fare. While the autonomy of the institutions is healthy, it is the lack of central coordination that is undermining the sector and leading to the decline of higher education.

Universities in Zimbabwe operate under an Act of Parliament. The relationship between the government and the universities is very loosely defined. The National University of Science and Technology Act (1990) simply states that, "Subject to this Act and any general directions as to policy given by the Minister, the government and executive authority of the University shall be vested in the Council" (p 348). This clause has been widely interpreted by various Ministers and the universities have experienced both extremes of state control, the tight and the laissez-faire. Ziderman and Albretch (1995) claim that this method of resource allocation magnifies government control over institutions. In Zimbabwe, the situation is slightly different because once the grant has been allocated, the government allows institutions to redeploy resources with the exception of the capital grant. That notwithstanding the method has little room for incentives and does not promote efficiency.

Funding sources and mechanisms have a powerful impact on the way resources are used and also on performance of institutions as well as of individual staff. Most governments play a major role in the allocation of

resources to higher education institutions. Generally governments concern themselves with horizontal equity and the effect on the regions served by these institutions. There are other key consideration such as internal efficiency, the mission of each university, the match between the institutional strategic plan and that of the government. There are a number of models used at the system level for the allocation of resources and these models have advantages and disadvantages for the institutions. There has been a strong output based funding because it gives the universities more autonomy. However due to problems associated with performance indicators there is still a preponderance of input based funding. Other issues at stake include the need to reduce financial dependence on government by diversifying revenue bases for universities. Therefore an examination of the role of government in financing higher education is one aspect; other aspects are the level of investment in higher education; policy issues on access and quality; whether there should be more centralization than decentralization in the process of resource allocation.

Funding and Resource Allocation Models

There are a number of models that are used by different countries for allocating resources to the higher education sector. These fall into a number of broad categories. In the centralized group are input based, negotiated or formulaic output based methods. In the decentralized group is the market approach.

There are several studies that have been done on resource allocation in higher education, at both the system and institutional levels, (Jongbloed, Vossenteyn & Hans, 2001; Volk, Slaughter & Thomas, 2001; Casper & Henry, 2001) but only a few (Leifner, 2003) have focused on the perceptions of university personnel and how they view the way allocation mechanisms affect performance of the individual staff and the institution as a whole. Jongbloed and Vossensteyn (2001) state that, "The major advantage of funding formulas is that because they use objective criteria , they provide a clear insight into the distribution of funds among higher education institutions. Therefore they facilitate comparison (p. 130).

In Zimbabwe, the sparse literature available on higher education focuses on the history and development of higher education and in particular the change from an elitist to a "mass" system (Chideya, 1991; Maravanyika, 1992). Kariwo (2007) is one of the recent studies on the impact of policies on widening access in higher education in Zimbabwe. There are several models that have been used in allocating resources in higher education. The models are at both the system level where the government is allocates funds to individual institutions and at the local level where each institution allocates resources to individual departments. There are two major categories, namely the traditional models of faith-based allocations and the more recent methods of performance management. But within these models are issues around power, governance, politics versus the more formulaic and objective approaches.

Models can also be classified as follows:

1. those based on economics of education and therefore use costs and efficiency studies as critical to the operations of an institution. They use salaries of staff as inputs, fulltime student equivalences in working out loads grants earned by departments etc.
2. those that use the rational/political models
3. those that use critical theory, feminist theory. These ones use variables such as gender, status of faculty and students

Whichever model one adopts the tensions remain between funding and academic autonomy of faculty. The fear from the recent models that are performance based is that faculty have to respond to market forces, which may undermine their unfettered quest for "new" knowledge. This introduces a dilemma when discussing faculty performance. The problem is how to evaluate faculty performance. In Zimbabwe the public universities are using traditional methods which may not be as relevant to their situation.

Volk et al. (2001) examined two models of resource allocation in the United States to determine which best explained the allocation of State dollars. They showed that departments characterised by (male) fulltime faculty, graduate degrees and grants and contracts tended to be more highly resourced than those characterised by (female) adjunct professors and undergraduate student credit hours. Universities have had to

restructure as a result of resource constraints. Resources determine who is hired what is taught and by whom. Therefore departments are key stakeholders. They confirm that the quality of faculty and workload in turn influence research norms and productivity.

In as much as there are theoretical models on resource allocation at the system level, there are also models at the institutional level. Williams (1992) identified four broad models, which are collegial, bureaucratic, political and market. The collegial model emphasizes common values, decision-making by consensus and the community of scholars. Williams observed that Block grant funding and un-earmarked private income is supportive of collegial or political approaches. Academic criteria tend to determine resource allocation decisions and they may be consensually or conflictually reached. On the other hand the bureaucratic model stresses hierarchy and the concentration of power. Budgets itemised by detailed input categories support bureaucratic processes with external regulation by the state. In the political model there are characteristics of the collegial model, consensus is replaced by intra-institutional conflict. Finally the market model draws attention to the university as a network of internal and external incentives and rewards. Output oriented programme budgets encourage market styles of management.

Thomas (1999) observed that formula based allocations supported devolution of decision making to cost centres, which are mainly the teaching departments of faculties. The development entailed a cultural change in that academic heads had to have managerial skills as well in order to survive. Although he mentions the consequences such as further staff development and acquisition of skills in planning and management the study does not mention the impact on the core functions of teaching and research. There is need to investigate this aspect which is critical in determining the effectiveness of academics given the added managerial responsibilities.

Budgeting processes and impact on performance

In some countries tertiary institutions receive budgets calculated on the basis of formulae embracing enrolment figures and unit costs. Various complex weightings are used and these differentiate institutions on the basis of field of study, level of education, type of institution. The weightings reflect differential costs. As a resource allocation method, input based funding appears a rational way of allocating resources at the system level. It has been criticized where local conditions require some historical imbalances to be addressed. An example is the government White Paper (1997) reviewing the allocation method used in South Africa. In other countries negotiated budgets are preferred. They involve the production of estimates of expenditure based the history of the institution.

There are no clear criteria related to the internal workings and performance of each university. A study by the World Bank (1992) observed that such funding mechanisms are not transparent. They fail to provide incentives for institutions to operate efficiently. They also make it difficult to adjust the distribution of financial resources to suit changing circumstances and needs of particular institutions. A review of literature shows that there are formula based methods that may offer alternative approaches. Earmarked Funding is really an extension of negotiated budgets. In the White Paper (1997) the Department of Education of South Africa, stresses local conditions, in its new funding policy. It states that, "Funding formula cannot take account of all differences between institutions without becoming two complex and unwieldly. Nor do funding formulae lend themselves to accommodating particular needs, especially if such needs are expected to fluctuate or diminish over time." In the recommendations for a new funding formula, the South African universities will use earmarked funding in the transition to formula funding based on load. The idea is to address historical imbalances emanating from the Apartheid era.

Block Grants

Critics of earmarked funding argue that block grants are a more effective way of allocating resources. The basic principle of the block grants system of financing is that responsibility for budgetary allocation is

devolved to autonomous universities. This approach encourages financial responsibility and local efficiency optimization. The institutions would control a fixed budget, which makes the opportunity costs of any specific expenditure decision clear and easier to achieve.

Block grant budgets are effective in a relatively small but expanding higher education system. When universities start claiming a larger share of the public budget then there is increasing political pressure for their regulation by government. Some countries have decided to adopt output based funding methods to increase transparency. A study by World Bank (1992) cited the Netherlands as one example of a country using output based system of funding higher education. Essentially the universities were funded on the basis of the number of graduates who complete their programs. The method has been criticized for failing to address, up front, the problems that face universities such as academically poor university entrants. The method would be difficult to implement where new institutions are being established and which need at least three years before their first cohort of graduates. The method does not take into account other factors such as staffing and equipment and the processes that are necessary for certain quality and quantity of graduates to be produced. The countries that have complete de-regulation have adopted the "market" model. Examples of this type of resource allocation are found in the United States. This form assumes that students behave as in a market and are able to shop around for programs and institutions that they want. They

pay for the services and in general the best institutions have no problems in finding students. The government provides fee vouchers to those students that it supports.

Financial Diversification

Some authors, for example, the World Bank (2004), argued for financial diversification in African Universities, as a solution to problems of under-funding by government. In this approach universities would be expected to consider other sources of income instead of relying solely on public funds or the tax payers money. Their arguments are based on the premise that tuition fees are too low if not negligible. Experience has shown that most schemes adopted to increase fees have failed (e.g., Ghana, Kenya and Zimbabwe), due to lack of consultation with stakeholders. This has led to student demonstrations, some of which have been quite violent resulting in temporary closure of the institutions. In a number of cases the government has responded by freezing fee increases or converting the loans to grants. This issue is highly political and has been treated as sensitive by governments, particularly during election time.

The University of Makerere in Uganda, is an example of how a university can turn around a situation of decline to stability, through income generating activities. Kigotho and Bollag, (2002) reported,

Makerere's rebirth has rested on three pillars: decentralized

> *management, the development of courses that respond to student demand, and the creation of new sources of financing to supplement meagre state support. That new financing comes mainly from tuition.....* (p. A 41).

However, the increased access in the Makerere "model" has introduced another problem, that of inequity. The students who are able to pay the full cost fee come from wealthy families. Diversification of the resource bases of universities and other institutions of Higher Education has been suggested as a way of reducing dependence on government and therefore the impact of economic fluctuations. Mwiria et al. (2007) in their study of public and private universities note that, the main focus in reforms for Kenyan universities are: governance/management, quality/relevance, access/equity and expansion /integration and finance/financial management. The study emphasized financial diversification as one option out of the problems of reduced funding from government and strategic planning. It also recommended increased support of the principle of privatization. Mwiria et al. recommended that higher education institutions use available resources efficiently as away to grapple with the financial constraint that almost all tertiary institution are facing.

A Synthesis of the Literature and Conceptual Framework

This study was based on Institutional Theory, DiMaggio and Powell (1983), Scott (2001), Meyer and Rowan (1977), Zucker (1991), Spillane & Burch (2006). I also used the Production and Resource Dependency Models which are very much connected to the central idea of resource allocation. This Theoretical framework has not been applied to studies involving the organization of African universities. The focus of Institutional theory that I have selected, discusses institutionalisation as the instilling of values and the instilling of a social order (Scott 2001). I explored the idea that individuals in an organization attempt to continue the organization's desired attributes of predictability and certainty. However in the process the interests of the individual become subservient to those of the organization, In my application of Institutional theory, three tenets that were critical included, "isomorphism," "mimicry," and "agency." Isomorphism pertains to the way organisations are coerced to conform with each other by being members of or identifying with an established group. Mimicry, relates to organizations copying each other's models in order to gain legitimacy. Finally, in the new institutional theory is the idea that "agency" plays a more important role in shaping organisations because the individuals in the institutions do not necessarily have to share the institutions values. This is a great departure from earlier forms of institutional theory which claimed that the interests of the individual become the interests of the institution responsible for its survival (DiMaggio, 1988).

African universities have been trying to reframe themselves (van WykWyk & Higgs, 2007; Juma, 2006 & Chideya, 1982), but have failed because of "coercive isomorphic forces" (Burch, 2007; Spillane & Burch, 2006; Zucker, 1991). They identify at the macro and micro level of organizations, environments which dictate the acceptable norms and values. For instance, at the macro level, African universities belong to the Association of African universities. In order to gain legitimacy, the individual institutions would follow the norms and values established by the majority of the members of that association. Therefore, they "mimic" other institutions in the group. The influence goes beyond, because the AAU, as an organization will to gain legitimacy by relating to other bodies, such as the Association of Commonwealth Universities, the UK Universities Association, the North American University associations and many others.

I also observed that there is a general drift to introducing market models in universities and many African Universities are taking those on board too. This is where I make a connection with the Input and Output/Resource dependency models. The universities that adopt the market model would need to be competitive. That means they have to ensure that the inputs into the system produce products that can be marketed. The products include the graduates and research as well as patents. Bidwell (2006) and Rowan (2006) have reported on the growth of the market based reforms that now constitute the new institutionalism. In higher education, the US has by far the largest number of institutions using the market model. In Africa, because most countries have just one or two universities the market model does not work.

An examination of the African universities however, shows that there is a creation of new structures to facilitate income generating. There are new offices that have been established, for example, the international office for student recruitment, the office for fundraising and development. For the academic staff, changes include the hiring methods which now entail the ability to attract research grants.

Finally when I applied Institutional theory in analysing how Zimbabwean universities developed, I found that most of the new universities have simply adopted the model, rules and regulations used by the University of Zimbabwe, the oldest and most established public university (Kariwo, 2007). Institutional theory challenges the rational concepts of organizations as internally goal driven and technically efficient. Meyer et al (1983) observed that organizations tend to seek legitimacy which is achieved through conformity. I also used the Resource Dependency theory and according to Oliver (1991), this is a relationship where one organization is associated with another for fiscal, social or political need. It is noted that most governments tend to control universities because the government provide the bulk of the funding (Neave & van Vught, 1991)

In the next chapter I discuss the methodology which I used for the study.

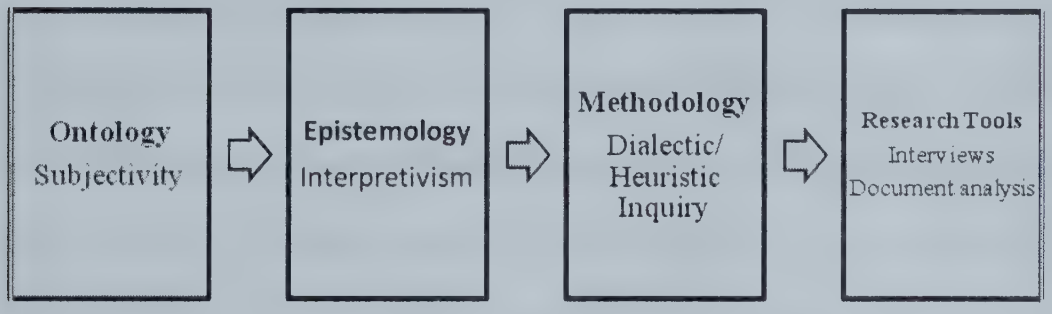
CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGIES

The Theoretical Conception

A qualitative approach was selected for the study. There is a link between methodology and philosophical underpinnings in research. In the figure below I show the research design for this study.

FIGURE III: RESEARCH DESIGN



Crotty (1998) described four elements that make up a research design, namely epistemology, theoretical perspectives, methodology and methods. In the above diagram I show how my research elements are connected.

I combine subjectivity and subjective social knowledge creation of such knowledge by human agents. From a qualitative perspective, Lincoln (1995) argued that any agreement regarding what is valid knowledge arises from the relationship between members of some stake holding community. This is not to suggest that there are no problems with this claim. Agreements in interpretivism/constructivism are not supposed to come from objectivity but from a communal test of validity. It relies more on a pragmatic concept of validity. In

fact the criterion for judging the value of the research will be whether it achieves its purpose (Maxcy, 2003). In research design there is a connection between ontology, epistemology and methods. The study is guided by ontological, epistemological, axiological, rhetorical assumptions that inform the methodology. Any research that claims to be of value must be grounded in some philosophical framework in particular the epistemological stance that is selected for the investigation

Ontology

The Ontological assumption underlying the study is that reality is multiple as opposed to the Positivist view that reality exists independently of people and can be measured. There is therefore not one truth. For Positivists, scientific truth is a "real" reality, but the problem is the flawed human apprehension of it. Scientific truth and knowledge can only be obtained through rigorous application of testing phenomena using a template that is devoid of human bias and misconception. But for the Interpretivists, truth and knowledge can be defined as a result of experiential sensing and empirical observation. Because of the constructivist orientation being used in my study the emphasis is on subjectivity and subjective social knowledge, and the active creation of such knowledge by human agents.

Epistemology

The theoretical perspective I have selected is that of interpretivism. I interact with the participants and together we make 'meaning' of the situation

being studied. Maynard cited by Crotty (1998), says that epistemology ".....is concerned with providing the philosophical grounding for deciding what kinds of knowledge are possible and how we can ensure they are both adequate and legitimate. In the study the stance which I have taken is that, reality is that which is constructed by individuals involved in the research situation. There are multiple realities that exist in a given situation. Lincoln and Guba (1998), state that in qualitative research, the researcher tries to minimize the "distance" or "objective separateness between himself or herself and the researched." There is no objective truth waiting for us to discover it. Truth or meaning comes into existence in and out of engagement with the realities of the world (Crotty, 1998). Therefore different people will construct meaning in different ways even for the same phenomenon. The implication for the researcher is to be conscious of the different voices and to recognize them.

Axiological Assumptions

Higher Education is a contested terrain. Some hold the view that it is value-free, while others say it is not value free. I argue that it is value laden and will be guided by the interpretivist paradigm. Universities are made up of various departments and different people have different values. The administrators, the academic staff and students all have different values. In addition I expect my own values to influence the study but at the same time I was conscious of the values of the participants which also influence the research. The Axiological assumption in research is one of the criteria used to judge the type and quality of research.

Lincoln and Guba (2000) observed that values feed into the inquiry process in many ways, such as choice of the problem, paradigm to guide the problem, selection of the theoretical framework and data gathering as well as analytic methods. There are values expressed even in the choice of the context and choice of formats for presenting the findings.

Understanding values helps us make a distinction between positivism and interpretivism. For instance, positivism holds the view that knowledge is value free. On the other hand, interpretivism claims that values and knowledge are integral and multiple. Qualitative paradigms and methods are value-laden and biased. In educational research the researcher is integral to the process, hence he or she cannot avoid influencing and affecting the research. In my study of the perceptions of university personnel and performance, I find that there are biases and truth is differently held. There are contradictions between disciplines. As a qualitative researcher, I have raised the question of validity. What is "truth" in constructivism? "Truth" for whom? Who is doing the judging? These are not easy questions. The debate is complex and touches on ontological, epistemological and methodological conceptualizations. One can start with conventional validity where science has a cause and effect relationship which facilitates prediction. Here validity is easier to determine. In interpretivism there are different ways of knowing the truth. We therefore encounter interpretive validity where objects, events and behaviour have meaning to people engaged with them. In some sense this is internal validity as opposed to external validity.

In qualitative research we are less concerned with validity and generalizability which are in the realm of positivism. Rather we are more interested in lived experiences. Therefore, the validation comes from the community of scholars that we will be addressing. There is a multiplicity of voices to be heard. In qualitative research, validity has a different meaning. It is the idea of "trustworthiness" within a given community. I explore this concept further in the following paragraphs.

Rhetorical Assumption

I focus on stories and that use of the first person 'I' and metaphors are characteristic of the study as in any qualitative research. I used thick description in my report. Lincoln and Guba (1985) observe that the use of such terms as credibility, transferability, dependability and confirmability form some of the key terms in the language of qualitative research. This is in contrast to such terms as validity and generalizability, used in quantitative studies. Stake (1995) refers to naturalistic generalizations and that the study becomes personal.

Trustworthiness

In order to ensure the trustworthiness of the results that I obtained in this investigation, I included particular strategies such as the selection of a typical site which represents the problem under study. I also used purposive sampling in the section of the respondents who are likely to have relevant information. In order to increase the validity of the data I triangulated the data collection methods. As Glesne and Peshkin (1992) contended, that qualitative researchers depend on a variety of

methods for gathering data. They further argued that the use of multiple data collection methods called triangulation may include multiple data sources and investigators. Wellington (2000) stated that triangulation of methods is methodological pragmatism. He cited Schatzman and Strauss (1973) who observed that the field researcher sees any method of inquiry as a system of strategies and operations designed to obtain information which can be used to for answer certain questions about events which interest him or her. This confirms the view that the researcher cannot be just an observer but that he or she is intricately involved in the process.

In this study, I used mainly interviews and document review. Lincoln and Guba (2000), stated that interpretivism has replaced the traditional positivist criteria of internal and external validity with such terms as trustworthiness and authenticity. I followed their criteria of ensuring trustworthiness, such as persistent observation, peer debriefing, and member checks. Rudestam and Newton (2001) observed that, *"It is common in qualitative research to return to informants and present the entire written narrative, as well as interpretations derived from the information, with the intention of confirming the accuracy and credibility of the findings" (p. 99).*

I made available the interpretations from the transcripts to the interviewees as one way of fulfilling member checks. I used that opportunity to clarify any apparent contradictions. By sharing with the participants my interpretations of the data, it allowed me clarify, adjust and probe further for additional information. In the case of interviews and observation, there are assumptions that we make

regarding the context of the research process and this grounds the logic and criteria of my methods. In the type of inquiry that I have selected, I used semi-structured interviews and non-directive form of questioning.

To increase the trustworthiness of my results I also incorporated the comments of my supervisor on improving the questions on the interview schedule. Before using the schedule I tested the clarity of the questions on colleagues in the department. The schedule was therefore subjected to both internal and external scrutiny. Finally, I used the focus group interviews to cross check and to triangulate the results from the individual interviews.

DATA COLLECTION METHODS

Document Review

As a secondary source of data, I reviewed documents from the universities such as minutes of key committees, annual reports, universities mission statements, strategic plans. I also reviewed the University Acts, being the legal instruments that establish these institutions. Some relevant reports came from the Planning and budget committees, Council and Senate as well as Faculty planning committees. The Planning and Budget Committee, deals with the finances of the university while the Senate deals with academic policy. The Council minutes contained all approved policies of the university. From the Government ministries, I reviewed policy documents on higher education as well as government press reports on new policies. I also analyzed the current strategic plan of the Ministry of Higher Education, commission reports on education and higher education and the government's National Development Plan as well as policy circulars on higher education.

I tried to find out how policy influenced the performance of public universities. For instance how was funding influencing research? Or how was funding affecting the size of classes at the university and therefore the performance of professors? At a local level I tried to find out how the decisions taken in committees affected the activities of professors in teaching and research. After reviewing the documents I used content analysis, to identify recurring themes. I used the research questions to code the themes. I was guided by the research questions in selecting relevant documents. Roberts (1997) observed that,

"themes are pre-specified by the research question. Other times, investigators attempt to measure all the themes they can discern in a text." Documents were analysed for specific themes. The themes were then developed into categories. From the categories higher-level analysis produced a theoretical conception of the problem and solutions. Holsti (1960) observed that content analysis as a research methodology has been used "for research problems in which the question can be answered directly from a description of the attributes of content. (p. 43). The rationale for content analysis is that words and phrases mentioned most often are those reflecting important concern in any communication. Having given consideration of the various forms of content analysis, I selected text analysis which is a more qualitative approach compared with traditional content analysis. Roberts (1997), states that thematic analysis of text is quite informal and involves "more or less" judgments rather than numerical measurements. As a research method textual analysis tends to be used to compare themes over a period of time or across sources.

The documents were analysed using qualitative content analysis (Mayring 2000). The documents were selected using the research questions. Roberts (1997) observes that "themes are pre-specified by the research question. Other times, investigators attempt to measure all the themes they can discern in a text" Documents were analysed for specific themes. Themes were developed into categories. From the categories higher-level analysis produced a theoretical conception of the problem and solutions. The words which were mentioned most often were considered to be important (Holsti, 1960).

Interviews

In the study, I used semi-structured interviews, which is a combination of open ended questions and structured ones. The interviews were audio-recorded to give me a chance to concentrate on the questioning and probing. The audio recordings were transcribed soon after each interview. In order to triangulate the information I also used focus group interviews. The advantages of interviews include flexibility in finding out information. Added to ease of adaptation is the use of observation, which is a key technique in research. Robson (1993) stated that,

> *The interview is a flexible and an adaptable way of finding things out. The human use of language is fascinating both as a behavior in its own right, and for the virtually unique window that opens on what lies behind our actions*. (p. 229)

Interviews offer the possibility of modifying one's line of enquiry and to probe further particular points. I discovered that interviews had certain disadvantages. For example they were time consuming. They were at times so difficult to control. For instance it was difficult to schedule appointments with interviewees in particular the senior officials at the Government ministries. That notwithstanding, the face-to-face interview is quite informative and productive because I was given an opportunity to probe issues.

I completed 22 interviews in this study. Only one interview was conducted over the phone due to problems of scheduling. Interviews lasted between 40 minutes and a little over one hour.

Selection of Participants

The assumption was that the investigator wants to discover, understand and gain insight and therefore must select a respondent group from which the most can be learned based on special experience and competence Merriam (1998). In this study the strategies adopted in identifying respondents include convenience, opportunism, snowball or chain. The participants were drawn from the following groups of people whom I, as researcher, believed to have relevant information. From the universities' senior management I interviewed 5 participants from the grade of the Vice-Chancellor, Deputy-Vice Chancellor, Registrar, Bursar, Deputy Bursar (Planning). I also interviewed 11 academic staff from the grade of Lecturer to Professor, of whom 3 were Chairs of departments. In addition, I interviewed 3 Deans of Faculties. From government, I interviewed 2 Directors in the Ministries of Finance Economic Planning and 1 Director from the Higher Education ministry. In the report no identity of the respondents is revealed in accordance with the ethical standards approved for the research.

In the next chapter I present the analysis and interpretation of the data which I collected.

CHAPTER FIVE

ANALYSIS, INTEPRETATION AND DISCUSSION

In addressing the main research question which was, "What were the perceptions of university staff and senior government officers regarding resource allocation and the way it impacted the performance of faculty and that of universities in general?" Several broad themes emerged from the documents and interview transcripts. I have analysed these themes and I present the discussion in this chapter.

Government Policies

The funding policies for higher education in Zimbabwe are driven by the political and social need to widen access for the majority of the black people, who had hitherto been disadvantaged. There is also the economic imperative to produce highly skilled manpower. An official from the Ministry of Higher Education stated that the government was establishing more universities to increase the number of places available. He said,

> .....*Coming to higher education the government's policy is to establish at least one teachers' college by the state, one technical college by the state, and one university by the state, in each of our ten administrative provinces. As you know, there are now nine state universities including Lupane State University whose Act was promulgated in 2004 and of course Harare Institute of Technology, which originally was operating as a technical college but now transformed into a degree granting*

institution. The only provinces where we don't have state universities, are Matabeleland South, Mashonaland East and Manicaland.

The report by the Ministry official highlighted a lot of expansion in higher education, which is being driven the necessity to create university places as a result of the expansion that happened initially, in the primary schools and subsequently, in secondary education (Kariwo 2007). The policy for widening access became more pronounced in 1988. Despite efforts to expand the system capacity is lagging behind demand and all the universities established to date cannot admit all the students that qualify. The government's intention, soon after independence, was to finance this through public funds, which meant the full cost would be borne through the fiscus. As the financial burden became worse, the government introduced cost- sharing. For universities, this meant funding for students was going to be split between a loan and a grant. Previously the government had given university students grants and bursaries for their education (Budget Speech, 2009).

The Government Funding Model

The evidence in the study shows that there were several factors which influenced the performance of professors at public universities. The factors include government policies on funding and resource allocation methods. In a number of institutions the way the resources were allocated within the institutions themselves impacted the professors teaching and research. I discuss this issue

later in the chapter. Apart from the level of funding other factors were the culture within the universities, it was noted that some universities had well established teaching and research traditions while others, particularly the new ones were still in the process of establishing themselves. Therefore there were several sub-themes that emerged such as organizational culture, academic leadership, strategic planning, research culture efficiency and effectiveness. However the internal policies continued to evolve around funding and resource allocation, communication and staff conditions of work. It was difficult to separate institutional and national policies because they were intricately connected. Internal university policies were designed within the context of the national policy framework.

Many respondents were aware of the process by which government allocated funds to the institutions. However they found that there were long waiting periods for the funds and on many occasions the funds allocated fell short of the bids submitted. This was frustrating because the professors had to change their plans for teaching and research in the middle of the academic year. The level of funding from government was a key factor in ensuring success of the institutions. Notwithstanding other factors were the efficiency of the institutions themselves and the effective use of the allocated resources.

Shift to Performance Based Management

An interview with the ministry of finance officials revealed that the government was moving towards performance based management. The

institutions would sign a performance agreement where all employees would be paid according to their performance. To set up the whole process universities would have to work out performance indicators. This was going to be a huge paradigm shift. The process was to start from 2006, when the government adopted results based budgeting. The Ministry of Higher Education, through the Secretary for Higher Education, would sign an agreement with each Vice-Chancellor. According to the Ministry of Finance this contract would reflect the need for some accountability from the universities. She said the contract would be,

> *.....in terms of how they were going to be performing, what results they expect to produce at the end of the year and therefore the resources that they require for them to do what they are supposed to be doing. The Vice-Chancellor would in turn sign agreements with the staff in the university. The government was not going to be looking at these internal agreements. The responsibility would be delegated to the go to the university councils which were the governing bodies.*
>
> (Senior Official, Ministry of Finance)

It terms of formula funding the Ministry of higher Education did not have the indicators that would work in universities. They expected the universities to develop the indicators. The introduction of spending targets was expected to streamline the process and bring efficiency.

The Ministry official said,

We don't want to go back to zero-based budgeting as if nothing was happening. So what we are saying is nobody or no institution will get less than what they received in the previous year. But then we have got to apply issues of inflation and also look at efficiency dividends. .....But because we are starting the process we have not been very strict with efficiency. We still allow the ....in other words the change we have taken is very small but as we proceed we are going to tighten because we expect everybody now to be able to streamline their operations and be able to weed out all the waste which we have in spending these public resources.

There was evidence of mismanagement bordering on corruption in the handling of contracts for academic supplies despite the centralization of the procurement process and as one Chair of the Food and Nutrition department said,

On top of that the government is insisting that say we want to buy computers we go through the government Tender Board. The Tender Board is having the same corruption, which is happening in Zimbabwe. The Tender board is a difficult process. You have to put in bulk requests e.g. for the purchase of computers. The government tender was given to a bogus businessman. He would not provide the backup services. The university refused the tender. Up to now although we have funds we haven't been able to use them because government insists that the bogus businessman should be given the contract. The leadership in some universities has been not only inefficient but corrupt.

Another example of mismanagement, involved the use of the scarce foreign currency that the universities had. The government allocates some foreign currency to each institution to enable them to make purchase of books and equipment from outside the country. They also use the foreign currency to pay for travel abroad when attending conferences or going on other forms of university business. However the foreign currency reserves in the country are very low. As a result there is a great shortage and government tries to prioritise the foreign currency allocations. Universities have not been ranked high because there are other sectors such as health, transport and defence that are given a higher priority. Some of the respondents interviewed cited the lack of transparency in the allocation of foreign currency within the institutions themselves.

> *Somebody was telling us that we have so much money in forex which is sitting there but I suppose being used by "top guys" for their travel. It doesn't filter down. No! So what is it there for us?. Who is benefiting?*
>
> (Interview with a Professor from Biochemistry)

Some participants cited the allocation of funds to enhance the benefits of select officers. The benefits included the procurement of fuel for use by the senior academic and administrative staff. At the time of the study petrol was in short supply throughout the country. The staff who commuted to work, were finding it extremely difficult to get to work and this affected their performance. A Senior Lecturer from the Institute of Development Studies said,

And we hear that some people have bought cars, they have done this...they give petrol to themselves. Why can you let some of those privileges filter down to your staff? Right now we don't have access to fuel. Why can`t they go and negotiate with the state that we... our lecturers ....why can`t we give them coupons and cheaper fuel so that they can come to work

An interview with one professor indicated that income generation was being thwarted by inefficiencies. This is an unusual development in academia. But illustrates the point that universities are also a mirror of the society in which they exist. She cited an example of the poorly managed university farm.

The university should also be income generating....self sufficient. They have a university farm. We don't even know what the farm is doing? They should have a farm where they should be feeding students at the university. Even supplying food at cheaper prices for lecturers here or even supplying people in the community, but we don't know what is going on there. So there is some level of management or mismanagement of resources somewhere.

(Interview with Senior Lecturer in Political Science)

Inefficient Use of Resources

One respondent felt that there was inefficient use of the money that comes to the university from government. Although there were claims by institutions that government funding was not adequate, there was also evidence that universities

were not using the money efficiently. The respondent was asked to comment on the priorities and the allocation of funds at his institution. The perceptions of the academic staff on the use of the limited funds in the university were those of poor management and in some cases this could be described as abuse by the senior administrative and academic staff. One respondent commented how he viewed the situation in his institution,

> *You have raised an interesting question because recently the Faculty of Education dean invited all the chairmen from the Faculty of Education to go to Nyanga which is approximately 400 km from Harare for a workshop. ...and each Chairman was required to bring a computer. All that money was wasted. I call it wasting because it was not necessary to go to Nyanga for a workshop. The money could have been channelled towards buying resources for both lecturers and students. So sometimes we abuse the funds. May be we should say administrators abuse the funds. They do not give priority to those areas which are of necessity to the university as such. I wouldn't know about the higher hierarchy of the university like the Chancellor, the Vice Chancellor and the Bursars but maybe there is some abuse of funds in the whole university.*
>
> (Interview with a Senior Lecturer in Education)

The respondent was also critical of the new system of rewarding Professors who held positions of Dean. This new system offered packages that included enhancement of remuneration packages by including the use of the equivalent of company vehicles and the topping up of salaries with various allowances.

Organizations that use such reward mechanisms normally combine them with clear performance assessment criteria. The respondent questioned the wisdom of using scarce resources in creating performance related packages. This concept is borrowed from the private sector. The Senior Lecturer said,

> *Yes, this idea of having executive positions seems to be worsening the situation in that we are taking resources from somewhere to support just a few individuals. So they need X (dollars) to go with those positions. Like you are saying those executive positions need cars, they are given cars. Prior to that we had Deans whom we voted into office and the positions did not go with these perks at all. So they [the professors] were working for the department or for the faculties without having to be paid anything except I think, for a small allowance from the university. But now these executive positions, I think they are draining resources from the university.*

Institutional Capacity

The major problem in university capacity has been the brain drain. In the older universities some departments are threatened with closure. The brain drain has had a negative impact on the institutions. Most of the senior professors have left leaving very junior staff as lecturers. The junior lecturers need leadership both in teaching and research. In most of the institutions the situation is desperate and as one respondent observed,

I did allude to it, although I didn't really mention the term "brain drain." I did mention the fact that when we started our operations the number of PhD holders within our department was quite high. And now we don't have those kinds of people. Our staff compliment is now filled up with people who are at the Master's level. That is a direct impact of the brain drain that is happening within the country. What it means is that eh...for Chemical Engineering, for example, Eh...we started off with a professor and some people that were PhD holders. There was a professor from UK, and another from Nigeria and those people have since left owing to the unfavourable economic conditions that were in the country and the fact that they could not continue with their research because of the inadequate resources that we have. So naturally people wanting to rise and to build up their curriculum vitae have regarded the stay at this university as one in which they only do to improve their curriculum vitae in terms of the teaching component whilst the other component was suffering

(Chair of Chemical Engineering)

In the new universities professors are also affected by the deteriorating working conditions and are leaving for greener pastures. A deputy Vice- Chancellor had this to say,

I think our vacancy rate is really high...I cannot remember the figures but is probably about fifty percent. Obviously the vacancy rate speaks for itself how bad the situation is. And it is not only the numbers but it is the

quality of staff. The professors that we have are very limited. They tend to be, including myself, older white males who are still here. We are losing the bright and middle career staff.

As a result universities were now relying on newer and younger staff, which means that teaching experience, the depth of knowledge they are bringing in is going to have an impact on quality of teaching. A Professor of Biochemistry did not think that the situation was very serious. He commented,

Not perhaps a totally negative situation, but it will have an effect on the quality of teaching. When you are dealing with MSc's It is alright when it is one or two MSc's amongst a range of PhDs but when the whole number is MSc standard then it is a totally different thing. So the brain drain is having an effect.

Asked on the way forward, the Professor of Biochemistry had some suggestions of solving the problem of "brain drain."

..Eh.. to a certain extent it is outside the control of the university because the issue is not their conditions of employment here. It is their conditions of employment within an environment which is changing so rapidly that they cannot keep pace with employment ...or thinking of other possible avenues of retaining staff involves all universities and I know one university that if they offered tied accommodation to an academic job that would be one way of keeping people longer. But tied accommodation is

something common to other developed countries that rely heavily on contracts. So that would be unusual.

(Professor of Biochemistry)

Organizational Culture

The public universities have very similar organizational structures. They have largely a collegial system but supported by a bureaucratic administration. There was evidence that as the institution got bigger the bureaucracy increased. Decision-making power shifted to the central administration with the Vice-Chancellor and his top administrators making most of the key decisions. The faculty felt less valued and this resulted in the institutions being divided between the academic staff on the one hand and administrators on the other. In the last ten years all public universities adopted performance management and introduced short-term contract for faculty deans. This development has been resented by most academic staff because it further erodes the collegial culture that existed in the traditional faculties where deans had been elected *primus inter pares* (first among equals). The Deans have enhanced remuneration packages compared to the rest of the faculty. They have joined the ranks of the top administrators such as the Vice-Chancellor, Deputy Vice-Chancellor, Registrar, Bursar and Librarian.

As resources started to shrink the management in some universities became less transparent and less democratic. An interview with one lecturer revealed several shortcomings of the administration. Some of the issues that

concerned participants included the management style and poor communication between the top administrators and the rest of the university community.

> *To be honest it has to do with the management style. We have a management style which is not democratic. It is dictatorial, very hierarchical and "commandist." You must learn to listen to people's views. You must learn to say okay what is that? How would you want things to change? Give people who are participating at the roots there, a voice. You know everybody does not like what is going on because the administration, the leader of the whole thing is so dictatorial.*
>
> (Lecturer from the Political Science Department)

As a consequence, decisions were not taken in a democratic manner. Staff felt alienated in the whole governance process. Some participants felt that there was too much politics involved to the extent that the work of academics was being affected negatively. There was a feeling that the dictatorial approach was a barrier to performance.

> *If you are a person who is perceived as a dictator you are not democratic in your decision making, so there is no governance because you are not letting your staff have a say in how they are going to be... you know... The kind of environment you want is a non-threatening academic environment. But the problem is that the academic environment is now linked to the political environment of the larger society, so that is where the other problem is. Because it is like even some lecturers to be where they are, it is the politics of patronage.*

(Interview with the Professor of Economics)

Some academic staff interviewed, felt that in the hard times in which the universities were operating, it was important to have empathy from the administration. However this was not forthcoming because of the lack of understanding from the senior administrators. This affected their morale. A lecturer from Political Science said,

> *So you see we have an administration that is not sensitive to its constituencies. They don't care about lecturers. Because, if they really cared, they would do things that benefited the staff by pushing the government for more resources. But they [management] want favours for themselves only.... you see.*

Funding and Resources

There is evidence from the interviews and documents analysed that funds from government to universities are inadequate. The university libraries are short of books and journals, the buildings are in a derelict state, and as one respondent reported,

> *An overall assessment would be that the "standards" are declining. If you visit the university today you will find that it is in a pathetic situation. Eh...get into the buildings you find they need painting. Get into the classrooms you find that the furniture is broken. It's not being repaired. Eh...get into the library, you find that the books that are there are...most of them are old textbooks.*

Talk to the teaching assistants, to the lecturers, they are disgruntled by the situation at the university. Nobody is happy so you can think of it, ... the morale of an academic or of a lecturer is low, what do you expect him to do when he gets in front of the students? That will also affect the students in their performance. So overall I can say the "standards" and the "quality" have gone down.

(Interview with a Senior Lecturer of Education)

On the question of whether there was a link between resources and performance of faculty, some participants felt that there was a definite connection. They argued that one cannot teach or research effectively without the books, journals and equipment. The evidence came from both the newly established and older institutions. The new universities were struggling to get basic facilities such as offices and classrooms. They occupied temporary buildings sometimes in multiple sites. The older universities lacked financial resources to order more recent books and journals. The Science programs desperately needed laboratory equipment. The equipment tends to be very expensive and requires foreign currency, because it is imported. A Professor from Chemical Engineering said,

There is a direct link, because if you are looking at resources in terms of books for example, whether they are departmental library books or whether they are university-wide library books, those are resources. Eh ...if you look at resources in terms of computer or electronic aids for teaching, your teaching can never be the same if you are teaching using

chalk on the board or if you have the capability to down load certain graphics from the internet and then be able to show your students how certain principles and phenomena can be explained Eh....using those devices. But those devices don't come without resources.

It would appear that the argument that there is no link has been advanced in countries where resources are not an issue whereas in the Third World, it is certainly a factor. Some respondents felt that it was more important for the universities to acquire resources because the individual students could not afford to purchase items such as books. One of the respondents observed,

In other countries for example you can afford a laptop and you don't need a refund from the university because it is something that you buy for your teenage son or teenage daughter. So if you tell them that the key texts for this subject are X and Y they are probably going to find those resources in the bookshop somewhere at an affordable price. Well that is out of question in Zimbabwe and therefore the university becomes central in terms of the allocation of resource.

(Interview with the Chair of Chemical Engineering)

The Zimbabwean situation is about the political and economic meltdown. As discussed in chapter two, the Zimbabwean economy has been declining and at the time of the study, it was in a critical state. The government was finding it difficult to provide funding not only to the education, but to other sectors as well. The situation at one of the old universities reached crisis levels with infrastructure

having deteriorated so much. The maintenance budgets were just not adequate. To exacerbate the situation the assistance from donors was very much reduced because of the political situation in the country. One respondent highlighted this point and stated,

> *I don't think that the money is adequate, one. Two, what we are the priorities of the university? I would assume that the core business of the university is to teach students. Do you realize that right now the university cannot even afford to improve facilities at this university, or even have money for feeding students. Therefore the resources coming from government are not adequate. That is point number one. Secondly, donor funding has also dwindled because of Zimbabwe's image abroad. We are a pariah state. So nobody is interested in giving money to the university anymore. So all these things, I think it has to do with the volatility of the political environment that has made the situation worse.*
>
> (Interview with the Professor of Mathematics)

Teaching Equipment and other Resources

Teaching resources are really depleted. Older universities do not have new library books and journals and their laboratories are poorly equipped. In the new universities there are no tailor made facilities. An interview with the Dean of Science revealed that,

> *It is equipment that is needed. A lot of departments such as Chemistry and Biology need to buy teaching equipment. But usually the suppliers need to get the foreign exchange. So if they don't get forex the little financial*

resources that are allocated for buying equipment are not utilized. The labs are there but the equipment is not adequate. In the past what we have been doing, for some of the more sophisticated experiments is we have been relying on one of the older public universities in Harare. We have been bussing students to this university for laboratory practical work, but it has since become very expensive. We don't even have the fuel and the buses.

The evaluation of staff, through annual performance appraisals was a frustrating exercise because targets are not met. One of the reasons was the scarcity of essential resources. One professor commented,

So year in, year out, we experience the same problems of underfunding and in fact on the appraisal form they keep asking, "What are the problems? What is the difference between this year and last year?" We keep telling them we don't have the resources. We don't have working equipment. How can you be an intellectual at a university when you don't have a working computer? You don't have adequate facilities for teaching students. That in itself is a problem because you need a working computer and the internet so that you can also be looking to see what is new in your area or field of study.

(Interview with Professor of Business Studies)

In an interview with a professor at one of the new universities it was noted that the there was no basic laboratory equipment however the programme were

designed in a such a way that students would get training at the university as well as from hands on experience in companies. It was noted that there was need to push government for resources. The universities had to work tirelessly in lobbying government for additional funds. The consequence of reduced funding was the negative impact it had on the quality of the graduates produced. A Deputy Vice-Chancellor observed,

> *Eh.....the first impact when I arrived at this university was to realize that some of the very basic things were not available in the laboratories that should have been available. I don't know whether that's because the academics previously had not pushed hard enough for this or they were used to dealing with the situations. They were under-funded and didn't push hard enough. So I think that in terms of the practical experience level the students received in the laboratories it was perhaps less than optimum. The way we managed to overcome this as a university was because of the Industrial attachment year which is part of the curriculum. Students go on placements with various companies. They receive all sorts of practical experience which is directly relevant to their work experience. In that respect that lack on the part of our teaching is overcome. However that would not be an optimum situation. It is however compensatory.*

Financial Diversification

One of the possible solutions to the problem of underfunding of public universities by the government is to find alternative ways of raising funds. The process requires institutions to become innovative and in many ways to be

entrepreneurial. Evidence gathered during this study shows both success and failure. Asked on how universities could generate their own income, one respondent said,

> *I think my recommendation would be...the first one would be, universities in Zimbabwe should go out to the community. They should go out and look for partners so that at least they can improve the resources that come into the university. Secondly, they can also make some projects, initiate some projects. Each department or each faculty can initiate projects that can bring in money into the faculty that will help them to improve their financial situation. And my last suggestion would be, I know it is very controversial but it would be to increase tuition fees. Because right now you find that the tuition fee at all public universities are far lower..... much lower than tuition fee in some primary schools and secondary schools. So if tertiary education can be given free ...I mean it is just like free at that kind of level then something is wrong somewhere.*
>
> (Interview with a Senior Lecturer in Education)

Donors

International donors have played an important role in funding higher education in many African countries and Zimbabwe is not an exception. However, recently the number of donors interested in assisting in the country in the field of education is now very small. This situation has been caused by the political climate prevailing in the country. The withdrawal of donor funding has had a negative impact on research in particular and on some staff development

programs. The advantage of donor funding was two-fold. There was access to the much needed foreign exchange and the funding augmented the revenues of institutions assisted. The country is now considered a pariah state. Commenting on possibilities of collaborating in research one respondent said,

> *It is difficult to get the kind of links one would need. It is only those who are already Professors, those are the people who have links. So they already find a way out of this situation. One thing with donor funds which we used to have from Europe....They all pulled away. I could give examples of the Netherlands government, the Swedish government. This university used to have a big grant, the SIDA-SAREC fund that was pulled away too, due political and economic reasons... Political reasons in particular.*
>
> (Interview with Senior Lecturer in Education)

Many African universities have had linkages with universities in the North. The older universities in Zimbabwe had very strong ties that assisted in research and staff development. These linkages have also been affected by the political situation in the country. One respondent commented,

> *Yah! For example myself, I went for my PhD in Sweden. We had collaboration then with one of the universities and my university in Zimbabwe through the Biochemistry department and their Biotechnology department. I was the last person to go there. I did very*

well for my PhD and in three years I had done my PhD. My professor was very happy and he said, "If only we could give you resources to go and do this work home but my hands are tied. The government will not allow me to." Otherwise I could...What the University of Lundi does is, ...when you have done your PhD they want to promote that getting started. They give you basic equipment to go and start the research, all other requisites and a grant which you use. But for me they said I was an exception. Others like students from other countries such as Tanzania, South Africa, were being given that opportunity to get started. But for me because of the political situation, they would not give me the money.

(Interview with Chair, Food Science)

The Private Sector

Some universities were getting support from the private sector. However there were not many institutions that had managed to develop strong relationships to realise significant funding. The industries were interested in specific programs that would support the training of graduates for future employment in those industries. Unfortunately the private sector was also being affected by the general decline of the economy and the political situation. The Chair of Chemical Engineering said,

Our laboratories are the hardest hit. In fact we were lucky for example in Chemical Engineering where we got some donations from Anglo American and Rio Tinto when these companies were still doing well.

And also some donations in terms of books from Mr Tim Huddons when our relationship with the US was not yet affected by the land reform program. Those resources are the only resources that we have as a department.

Tuition Fees

Studies have shown that the charging of tuition fees is one way of reducing public expenditure in education. Examples from British and North American universities show that students pay as much as 60 % of the cost of providing their education. However, the question of charging fees at African universities has been a controversial one. Yet it seems the only option for a viable higher education system in Zimbabwe. The real issue has not been the policy itself but the implementation. Students are against the policy simply because they see the national resource allocation flawed. A lot of the government priorities have been questionable. The concern by most people is on social equity. This perhaps is one reason the government has not been very firm on the charging of tuition fees. One respondent reported that her university had introduced tuition fees. She felt however that the charging of fees would not work as a way of raising funds for the university. She commented,

But it has also been done at the university. Since last year they have started introducing a higher fee structure which has been prohibitive to students because they been used to being given all things free. But in most universities that I know of there is some form of payment. So in a

way technically it has been easy for Zimbabwean students because they have been used to this way of doing things. But the problem is when students graduate do they pay back to the state? They don't. There is another level of absconding. There are alumni students who no longer pay back what they owe as part of their student loans. So that is the other part of the problem. Yes! The fee structure is important but the problem is such a scenario would be ideal in an environment where there is employment. But where unemployment is eighty percent where the hell do you think those children are going to get the money from? Their parents are not working, there is de-industrialization, and the formal sector is constricted. There are no jobs in the formal sector. The informal sector is now the last the last port of call. And look at what is happening in the informal sector. So how can you expect poor children or working class children to pay such exorbitant fees when there are no jobs for them? In other countries the universities give jobs. And even those environments give jobs. Look at overseas students they even have cars. They go and work in the canteens at the university. ....They find jobs to do or something, so that they can earn money as students.

(Interview with a Senior Lecturer from the Institute of Development Studies)

It was common knowledge that the fees charged by universities were lower than some primary and secondary schools. The explanation by the respondent was

that there were two theories. One suggestion was the support of students by employers of their parents e.g. private companies do offer some financial support towards tuition, as part of employee benefits, which enables parents to send their children to expensive private schools or to universities overseas. One observation was that students from poor families once they get to the university expect full government support. She went on,

> *The problem is that some of the parents do not necessarily work for companies in industry. Industry is probably subsidizing those parents with children who are paying higher fees at university. But I think there is also a general mentality that, Ah! You know that "vanoda zvemahara" (They want free education) But you need to get away from that mentality. People have to pay so that you can appreciate the value your education.*

On whether students from private schools attend public universities in the country, the respondent said, that the majority find their way to universities abroad. A popular destination was South Africa. Another responded had some suggestions on fees, and was in agreement regarding the sensitivity of the matter.

> *Well it's a very sensitive issue like you have said and its difficult for someone coming from a poor background to access university education if you make it very expensive. But at the same time if you don't have to make students pay a lot of money in terms of fees and at the same time*

the government is not giving support to the universities, the result is we will continue to have the kind of decline... what word do you use? What is the noun by the way....that decline in quality and at the end of it we may not have a university to talk about. So maybe we have to find a way of making students pay and may be at the same time we might have to find a way of assisting those who are not able to pay. Like for instance you can a kind of scholarship program within the university system itself or maybe you can have community participation. You look for partners within commerce and industry. You can also raise money to form a scholarship fund for students. You can have teachers' associations at the same time also forming scholarship funds for those who are coming to the education faculty or department. I think there is away in which raise money if we have the will.

(Interview with a Senior Lecturer in Education)

One professor explained the problems concerning tuition fees an access to university education. There were some parents who could afford to send their children abroad but others could not. He said,

Some of them do, others don't. If they have parents who can affords some of them have been going to South Africa, some to Australia, some to UK, You know.....Canada, America and Britain, so it is a class issue, you know. Since last year they have started introducing a higher fee structure which has been prohibitive to students because they been used to being

given all things free. But in most universities that I know of, there is some form of payment. So in a way technically it has been easy for Zimbabwean students because they have been used to this" thing". [free education]. So how can you expect poor children or working class children to pay such exorbitant fees when there are no jobs for them? In other places the universities give jobs. And even the environment t gives jobs. Look at even overseas students have cars. They go and work in the canteens at the university. ....Given jobs to do something so that they can earn money as students. (Interview with a Professor of Economics)

The professor agreed that assertions by the ministry Higher Education that fees paid at the university are lower than those paid in high schools were true. But the problem is that parents were struggling to raise money. There were no jobs for students to earn that needed cash.

Income Generation

Universities have started engaging in income generation activities in order to augment their revenues. The sale of short courses is increasingly popular. In some universities are full cost recovery programmes known as "parallel programs" which are bringing in a lot of money. A faculty dean in one of the public universities commented,

Currently we in this faculty started programs for the Commercials where students pay higher fees i.e. an unsubsidized commercial rate. So

it's a way of generating income which can be ploughed back s that academics benefit. But it is working only in the commercials. With the natural sciences there is a constraint because we don't have equipment and the labs which I talked about. We do not have the resources to share between the students who are on the "parallel" programmes with those on the regular programmes. But we tried something else. There are students on a block release programme for Computer Science Education. They come during the vacations and they pay a commercial rate. It is another way to generate income. Then there is the farm which should assist if they generated meaningful income. I think at the moment that the farm is making a loss. It is just the bananas which we inherited from Mr Miller which are making a profit. But maize, soya beans, whatever other crop they have been trying to grow in the past season has been making a loss. The farm so far has not been useful in terms of generating income. Another source would be research, if we had some consultancies in terms of mining. The chemistry department had some.

(Interview with the Dean of Science)

Consultancies

One suggestion on the way forward is to use the example from South Africa where universities have to respond to market forces. Zimbabwe now has many universities. To survive the institutions need to go for activities that are can be directly giving income. They should start courses that are in demand for

sale and charge the market rate. The idea of techno-parks in the Science and Technology universities should be pursued so that research can be commercialized. Another way of raising funds that was suggested by the respondents was the use of alumni particularly in the more established universities. The new universities would probably be too young but it is something that they should plan. Using alumni can stimulate funds for development. Organising alumni requires setting up a tradition and may not result in large amounts of money at the beginning. However experience from other countries, for example, North American universities shows that alumni can support their former institution in a big way.

One Deputy Vice -Chancellor expressed concern at the level of dependency on government funding and indicated that the university was trying to change the situation. On being asked to what extent the institution depended on government he explained,

> *Percentages I don't have with me but obviously the percentage is extremely high. This is obviously something this university has tried to correct in different ways. The most obvious example has been the introduction of the so called fee-paying "parallel" programs which tend to run in the evening. Fees of course are one way of trying to establish the true cost of education and perhaps might have an impact on government in that respect. In terms of our own generation of funds it has had a minimal role perhaps overall in the university but it seems to*

be...well it has the potential to have an impact on those of our Faculties and departments where the programs are popular such as Commerce.

It was noted that the capacity to generate funds varied from department to department. In some of the universities, the Commerce Faculty was found to be very successful in generating funds from the sale of the Business courses. The long term success of the project was still unknown. One University was planning to develop a Technology park. The idea was to attract funds from industry. The university and industry would work closely together in the transfer of technology from the incubation to actual projects that would be taken up by business people. The Deputy Vice Chancellor said,

> *The other area where we are seeking income from other activities has been through the development of a Techno-park which is a way of generating businesses within the university which might spin off benefits. I think in the end the way that we are going to reach money more directly in the Techno-park is actually through real estate. If we had the advantage of using some of our campus space for letting out to technical industry to generate income there directly through real estate we could also indirectly through industry funding for the technical departments.*

The other possibilities that were mentioned included, publishing books as well as providing consultancy services. There were constraints though with any of

these ideas because of the lack of senior professors needed to provide leadership. The government was actively looking at facilitating income generation by universities. Examples were the acquisition of farms to be used by the institutions for production of food. There was scepticism from some professors on the viability of such ventures. The interview with the ministry of finance officials shows that government remained cautious on the policy. The officials said that government was supportive but under certain conditions. A vice chancellor explained that the universities were doing all they can to raise money but there were restrictions from government in the way they could use the extra funds. The universities would like to top-up salaries but the ministry was afraid that this could disrupt the salaries approved by government. Also the newer and smaller universities might be disadvantaged. He said,

> *We are being proactive. We are not getting everything we want from government. We want to raise money ourselves through consultancies through research which is contracted to other countries or to other sectors.*
>
> (Interview with a Deputy Vice-Chancellor)

In trying to clarify the policy, the official from the Ministry of Finance said that universities were free to use the money the way they wanted. She gave an example of some government departments that were already doing that. However her explanation was she was a bit of equivocation. She indirectly hinted at "double dipping". For instance if universities are allowed to keep those

funds which they raise are they going to come for funds from government for the same activities? She reported.

> *They can use the money as they wish. Well.... I think eh...If we look at the government departments for instance that are generating income some departments have been allowed to retain a portion of what they generating. So even for the universities I think it is an issue that can still be discussed in terms of do they have to retain everything or surrender part of it. If they retain everything what is the money going to be used for. Once we are clear I think and can see results on what the money is being used for, like I am saying some institutions have been allowed to retain part of the revenue. Or some have been allowed to retain one hundred percent of what they were generating.*
>
> (Interview with a Director from the Ministry of Finance)

Faculty Performance

The government is making a very large investment even though in real terms, the universities say they are under-funded. One would expect that then that the institutions have transparent ways of accountability. The government has until now left the institutions to evaluate their performance. This is likely to change once the Council of Higher Education Act (2006) is in full operation. The assessment of performance is two pronged. On the one hand there is the annual evaluation of individual staff and on the other there is performance management, which involves the whole institutions' systems. Asked to

comment on the assessment of faculty performance given the level of resources available in the university, a Professor of Mathematics said,

> *I think at the individual level obviously we have the annual performance assessment which is supposed to give the chairman and the administration some measure of how that department is performing. At the institutional level, I think it is rather ill defined until we look at the strategic planning processes. And if we look at the last strategic plan that was developed it was considered not to have been consultative enough so that the strategies that were laid out were a little bit too diffuse. But certainly we were able to use that as measurement to see whether we had made any progress. So the strategic process is the long term instrument for gauging our progress. The short term one is obviously the annual graduation figures and the relation to teaching but also in relation to research how many post graduate students you are producing. So graduation provides the measure from one university to the next. The only thing that we don't do is obviously to set up quality council procedures which will give some form of assessment so that university A may be turning out more graduates in say Commerce than university B it could be that when we look at the quality university B they are naturally of a higher quality because more time has been spend on them in terms of quality teaching rather than quantity production. It boils down to quality assurance which don't have instituted, academic audit all these things which we don't have in instituted.*

It was apparent from the evidence from interviews and document analysis that professors in public universities had heavy teaching loads leaving little time for research. The situation was caused by a shortage of professors and at the same time there were increases in enrolments. A professor at one public university said,

> *The classes have got bigger as well. Yes! Because of the shortages of staff, so the classes have gotten bigger and that is actually intensification of the work-load for professors and lecturers. So that is too much work. The quality can also suffer in the process.*
>
> (Interview with a Professor from Political Science)

The coping strategies of faculty were varied. Much depended on the experience of the individual. The junior professors tended to struggle more than the senior professors who were well established and had wider networks. Most respondents reported that their work was very difficult because of lack of resources.

One Professor reported,

> *It is quite frustrating. If you had a chance you could talk to the human resources director about people who are leaving. Every day people are leaving because of that frustration. It is not only because salaries are low. It is also when you fail to get the resources to do what you are supposed to do. Then it has serious impact. Besides teaching where you*

cannot buy a box of transparencies. We don't use overhead projectors. I mean power point. We are limited. We don't have the laptops. They cost in the region of US $ 5000. We are also in need some foreign currency. We need stationery. Besides we are failing to provide practicals which are good enough for our students. So that when they go out there they really practice what they learnt. You also find that our students are divided into big groups say 5 or 10 to do a single practical. This is not effective for somebody.

(Interview with a Professor of Biochemistry)

Another Professor confirmed the difficulties faced in getting resources for teaching. He said,

Well in terms of teaching, the same thing happens you know....when you want to make some copies for students, suppose you have got an article that you found out it can help students, you want to make copies for them, without much money in the department then there is little that you can do to support students in that area. And you also need to photocopy like I am saying, photocopying and printing articles but one problem that we had in our department was the shortage of toner. There were times when we could not get toner for the computers or for the printers so it was also a short coming in our research and in our teaching as well.

(Interview with a Professor of Mathematics)

The majority of the professors interviewed said they were remaining in the profession simply because they considered it as a vocation. They used whatever was available by way of books journals and internet searches for teaching and research. Much of the library material was out of date. Students depend on lecture notes provided by the professors. Faculty in some departments have had to design course packs which students purchase. Despite these constraints the picture one gets from an examination of the results as well as the overall student completion rates is that of good output. When asked to comment on the reasons for such successful output one professor commented,

> *Well may be I can only attribute it to the hard working nature of the academics. The students simply depend on the academics, on the lecturer, on the notes being given by the lecturer. It means there is a lot of reading being done by the lecturer. Because of the student population that we have at UZ, the University of Zimbabwe and the amount of books that we have at the UZ, there is some kind of incongruence. There are more students and fewer resources in terms of text books so they don't get access to a lot of information. There are...well the computers are there that they can use to get to the internet to get information but it is not so easy to access the internet because of the server, sometimes just goes down any time. The output that you are talking about could be attributed to the hard working nature of the lecturers and also the student.*
>
> (Interview with a Senior Lecturer from Education)

As for the mode of delivery, most professors use the lecture method even in the sciences where experiments and laboratory work should have equal importance and emphasis. In a university one would expect that students go out and find out information by doing research especially at the graduate level. But the constraints were clear. A Professor of Social Studies reported,

> *We do lecture and research. Now if there are no recent books, no recent journals, is it because they are able to access the internet. Yes! Through the internet, has become.....but you see, not all of them are able to access the internet. But the library at the university has computer facilities but you will find that a study done by one of our librarians.... You will find that most of the people who access the computers are men. With power shortages, how often can you rely on internet? And to go and pay for internet outside the free access....The generators have no diesel.*

Personal considerations and commitments

The current economic environment is very harsh making it very difficult for faculty to be optimally productive in their institutions. They spend fewer hours in the departments because they need to get basics for their homes for example food items, fuel for their vehicles. A lot of time is spent in queues for basic commodities. The other problem is power cuts in the country, which have adversely affected campuses as well. Some respondents reported that they have power on two days a week. They find going to campus when there is no power a waste of time because, they cannot use computers neither can they work after

dark. A lot of the faculty have had to take on other jobs that are not in line with their professional training to make ends meet. There are faculty driving their own "taxis" while others have joined the informal sector and engage in buying and selling commodities. The impact on faculty of the economic environment is harsher on the young and new staff who are still to own a home, a car and settle down. This group also has not established itself in academia and therefore finds it difficult to get consultancies outside the university.

In the study there is evidence on low faculty morale as a result of factors such as low salaries and poor working conditions. However there is evidence too that the motivation of faculty arises from a sense of vocation that most staff have. This is reinforced by the motivation to learn of the students. The quality of the students who enter university is normally very high. There is excess supply of high school graduates and only those who have good "A" level passes manage to a get a place in the university.

The high teaching workloads are a source of stress. Respondents reported very large classes, teaching too many courses and therefore not having time to do research. Many of the respondents interviewed were considering leaving for greener pastures outside the country. In a case where resources are shrinking there tends to be tension when allocating resources because of the increased demands.

Sociological and Economic Factors

In a case where resources are shrinking, there tends to be tension when allocating resources because of the increased demands. In some of the

universities in Zimbabwe the tension moved away from teaching to conditions of service. The academic staff, as well as the administrative and support tend to spend more time pressing for higher salaries. This means that the academic staff are not focussing on their jobs because their efforts are now more directed towards survival than previously. The tensions are dissipated when they understand how the meagre funds are divided. When there is ignorance about the issues concerning salary negotiations, staff engage in strike action, creating more tension. One respondent denied knowledge of academic staff carrying out other non-core activities to earn more money as part of their survival.

> *I am not aware of any ...most of them appear to be involved doing other jobs in serving such things as, doing extra teaching by helping other faculties or doing extra teaching on parallel programmes. I am sure one or two are also doing extra teaching in town, in colleges in town. That may have an impact in terms of the academic staff. In terms of the non-academic staff, definitely they do a lot of little buying and selling and cross border trading. There is obviously other activities that are going on. If there wasn't that in terms of survival we would have a much lower impact on their performance.*
>
> (Interview with the Dean of Engineering)

However in another institution a respondent was quite definite that this was the only way lecturers could survive.

I *think that many lectures "moonlight". You can't rely on the salary of a teacher at the university and say that is the only thing that you are doing. There is no way. You have to be doing other things and the university ends up like an anchor. Because you have job security and you know that every month you get some salary and then pay off certain things (bills). But it is not really..... It is security of tenure but not security of one's future... you understand! .....it is not social security....but security of tenure because you have a job. But other than that, I don't think there is much .... If you look at pension, and if I was to leave the university right now, my pension is meaningless. It has no value.*

(Interview with Senior Lecturer from the Institute of Development Studies)

The increase in strikes by lecturers is a sign that all is not well in these institutions. Since the early 2000s there have been frequent strikes by the academic staff and demonstrations by students. These methods have been used to press government for increases in salaries for the staff and loans for the students. The government in the end yields but the approach is disruptive to teaching and learning. A lot of hours are lost despite claims that staff try to make up for the lost time.

On average academic staff earn less than the equivalent of US 100 dollars a month, which has been recently increased, but remains inadequate. In order to survive some engage in "moonlighting" activities which are not connected with their academic careers such as buying and selling items, operating taxis, locally known as *chova.* Only very few have managed to get contracts for consultancy work. The most difficult conditions include lack of affordable accommodation, fuel if one owns a vehicle and in general expensive transportation. Basic food commodities are in short supply therefore staff spend more hours in queues trying to source basic items. There is no time to focus on ones teaching obligations. In a discussion with a dean of one faculty the following grim position was revealed. The Dean of the Faculty of Engineering said,

> *I think with the current situation the industrial action is always going to be there. What I mean is eh....look at a situation where a lecturer who is earning a gross salary of Z$12 million after taxes he would probably take home not more than nine million.....seven million and if you were following the papers the price of petrol has recently doubled to Z$ 23 000 and if you were to buy a full tank of petrol at that much. ..the tank is currently about 60 litres ...a small car has a 60 litre tank what it means you are saying in excess* of *eh....about Z$ 2 million for a tank of petrol and this is just for your travel. Then there is of course the school fees and the food. If you go into Jagger's Wholesalers and you were to spend*

a million dollars you are likely to come out with a packet a plastic bag which is full of goods so naturally of course they have a case but eh...we are in a situation where lecturers are aware that the situation is bad and the government doesn't have the money.

The disruption of strikes was having very negative impact on teaching. In a number of universities the academic calendar was hardly completed. Sometimes the professors would try to make up for lost teaching time. Asked on how to resolve the issues surrounding strikes and the improving the quality of life for the professors the dean said,

And it's a kind of catch twenty- two situation and the fact that also the leadership of the lecturer union is very young. They don't see some of these things the fact that the country has no sources of money. Even if you go on strike the money is not going to come from anywhere unless it is going to be printed. So yes, the strikes are always going to be there but these are strikes which have always happened in the past but we have never had a solution from a strike. In fact all solutions that have come were never as a result of strikes. So solutions that came ...came when the government thought they should change things for the lecturers but I don't eh ...in my eight years, I joined this university in November 1996 and since November 1996 I have yet to see a year or a situation where staff resorted to go on strike and they were rewarded as a result of the strike. So whilst I sympathize with the staff going on strike I see no

reason especially with the experience that we have that of going on strike because there is nothing that we have derived from the past.

(Interview with the Dean of the Faculty of Commerce)

Quality of Teaching and Research

The study shows that there are several factors that have influenced higher education quality in Zimbabwe. Some of the factors show that staff and students are working in an extremely difficult environment. The low morale of staff combined with high workloads were highlighted as critical factors in performance. The study confirms that there is there is a very strong link between the performance of the national economy and the funding of universities. As long as the economy continues to decline, the institutions will not survive. One lecturer commenting on the situation in his university said,

Things have gone down. It is the tip of an iceberg. They have really gone down. If you were to visit our labs, we have obsolete equipment we cannot repair. We can't buy new equipment and we no longer have chemicals on our shelves, and so forth. But even if you move around the buildings...the toilets are continuously blocked and they need repair. Even in the administration, the Vice- Chancellor, would tell you I don't have a toilet. We don't have money to repair the toilet.

(Interview with a Professor of Chemistry)

Defining quality in this study has been problematic because by its very nature the term is a moving target. The generic meaning applied has been

"fitness of purpose". Adams (1993) identified six elements namely, "quality as reputation; quality as resources and inputs, quality as process, quality as content; quality as outputs and outcomes and quality as value added (p. 7). The elements fit in with the production model used as a theoretical frame in this study. I would however add another element, which is "quality as efficiency". This is supported by evidence from the respondents which indicated some inefficient resource allocation within the institutions. It is a fact that resources are dwindling, but it is also true that the limited resources are not used optimally and efficiently. A Dean of Engineering reported,

> *Comments from industry and commerce do not indicate that the quality has declined. It seems the quality has more or less stayed where it is but however the people that are producing that quality are the ones that have changed. We never had a high proportion of Masters' holders as our lecturers. We now have almost exclusively those type of people in the department and of course the output from these two categories of people a PhD holder and an M Sc holder can never be the same. Because no matter what people say there is always a link to the theory that is taught our students and that inquiry that is inherent in a PhD holder. And the more inquiry there is in an individual the more he is bound to search around the internet and library for newer material on the subject. That is probably not happening because of the calibre of staff we are now able to attract due the inadequate resources that we have been talking about earlier.*

Graduate Output

The universities' output is mainly graduates taught at these institutions. In research there has been a serious decline in both the quantity and quality of the publications. This situation is attributed to the brain drain. The universities have not been able to attract and retain senior professors. Commenting on the impact of government funding on universities one respondent said,

> *No the impact has been pronouncedly negative. What I mean is, when I joined this university, the university was receiving very adequate resources. I would imagine we were sending at that time people to train outside the country and some of those people came back. Not all of them. But a lot of them came back and gave service to the university and the nation. And with time we were in a position where we could not even send a single person even to South Africa and that impacted on our strategic planning process. What it means is when we projected we would have this number of people trained in year X when year X arrived we didn't have that number of people trained and that was because of the inadequate resources that were channelled. Yet we started very resource intensive departments at this university. I mean departments like Chemical Engineering and Industrial Engineering that require substantial investment in terms of resources, in terms of their laboratories and we have not been able to support these departments in terms of resources. We have compromised on the calibre of the graduates that we are producing. We could produce better graduates*

than we are currently producing and we should, after ten years of existence. In more than ten years of existence we should be in a position to be training our own PhDs and Master of Philosophy graduates. We are not currently able to do that. We are only able to do that at a very minimal scale not because we are incapable in terms of our intellectual abilities but the resources for us to carry out that duty are not there.

(Interview with the Dean of Commerce)

Research Output

The research output varies from university to university. The newer universities are less productive in this respect due to a number of factors such as lack of senior professors, laboratories. On the question of research output, a chair from one of the old universities observed,

That is a serious one. We no longer have any research. It has really gone down. We used to do research through donor funds. Now that has since stopped because of the political situation. The government has not provided money. For example, in 2005 the grant was subdivided into teaching and research and so forth. During the course of the year the university ran short of funds for teaching. It just diverted all the research funds. The money was used for other things like paying for the telephone and water bills. So what it means is the only kind of research happening now is where we have a little bit of foreign aided research. For young lecturers like us that is a serious one because we need to develop

academically. One thing that the university requires is that once you are appointed, within a period of two years, you must have done research and published for you to become a permanent member of staff. Now people cannot be confirmed as tenure track professors because of that. We also use the research for promotion. When you want to be promoted to the senior lecturer grade you must have a minimum of eight publications in refereed journals and peer reviewed journals. Normally the university does not promote people on the basis of teaching because of subjective agreements that go with it.

(Interview with a Deputy Vice- Chancellor)

But in a respondent from one of the new universities said that funds were available what was lacking was a research culture.

So I think eh...as far as research was concerned I think there were funds available and I think that was more due to the structure of the university at the time when the research environment was fairly limited. To essentially push their project there didn't seem to be a drive to develop a research culture. And I am not sure we can attribute that to funding. I don't think funding was being adequately used. I wouldn't attribute directly to funding. In that respect I think the research side was perhaps more a question of the nature of the staff in position whether it was

expatriates on short contract whether it was young staff without guidance and experience, I think that culture is changing... that culture is changing

(Interview with a Professor of Biochemistry)

However in another university the situation was different. The limitation on research was imposed by lack of funds. Unfortunately promotion of the academic staff depended on one's research output as well as teaching excellence. Supervision of graduate students was also affected. Quite often those who conduct research at companies or manage to get funding from the private sector often have to follow the research agenda from the companies. Commenting on the situation the Chair of a Food Science department said,

That entails a lot of research projects where we don't have the money. Right now in our Institute we have one honours student who has to do research projects and we are lucky that we have an agreement with National Foods and some other companies which are sponsoring the research, but not the research which we would want. They just go and solve a problem at the company. That is what they call research. So it is not what we would prioritize in our teaching. You have to follow what the company wants.

Research publication is problematic in African universities because they use standards that are external to the continent more than their own. They try to aim for international recognition. Therefore many academics do not see value

in the local research. A lecturer at one of the new universities commenting on the type of research going on said,

> *Not all research leads to publications. There is research that is sometimes done when someone is still trying to find a direction and when they are probably doing research which is related to technology transfer that benefits the community around him. That type of research may not result in a publication but is research all the same. But however for an individual to get promoted there is need for some output of some sort either in the form of a research report or either in the form of the journals that you have just talked about. But as I alluded to earlier on, members of staff are either publishing the material that emanated from their PhD research whilst they were outside this university and that then gives them the promotion for senior lectureship. But there are not that many lecturers within this university that are doing research that originated within this university. That is research that was outside their PhD and as a result there not that many people that are publishing in these high powered journals that you referred to. And until we reach such a situation where our resource allocation within the university is at par at least with those that are within the region, let us say in South Africa for example and Lesotho and Swaziland, we cannot expect our lecturers really to produce...we cannot put a number... We cannot say a lecturer should produce two research papers per year. Because in order to say that we need to give them the means. We need to give them the*

resources and without the resources it would be unwise of us to say that each member of staff is expected to have this number of papers per year. But that is something we look forward to in the future for planning purpose.

(Interview with a Professor of Economics)

It was apparent that due to the funding constraints research is being determined by industry, but it is not really the agenda of the universities. As a Chair from Food Science observed,

Like the one course I teach, Food Fermentation and I am also teaching Product Development. And this semester I invited people from industry to come and talk to our students to give them an overview of the situation with our industry. Because of the economic situation in which we are, our industries are not focusing on anything else except increasing production. As long as they are producing and people are buying, they are not worried about the quality. They are not worried about anything else, even if it means removing packaging or whatever. As long as they can still pay levies, because they are supposed to continue production, according to government, so they will not focus on R and D (Research and Development) for example. That is a luxury they can never afford. They are not worried about the quality. So you find the kind of bread you get or the kind of food you eat, there is no quality control to it. So because of that they are not worried, even the new product for example...to develop new products they are not worried

about that. As long as they are producing the same type of food and people are buying that food. So in that situation they cannot even sponsor research.

The major inputs into higher education in Zimbabwe include financial resources, buildings and plant infrastructure, such as laboratories and teaching equipment; human resources, which are divided between staff and students. An analysis of the inputs shows that generally universities in Zimbabwe are being under-funded to the extent that quality is now threatened. A Dean of Commerce said that the quality of inputs was high and contributed to the high quality of graduate output despite the decline in resources.

I wouldn't argue for better but maybe I would say it has remained at the same level....or remained at the same level. But not even gone down as well, because quality *of students that we have has also got has improved. For example we take only 14 and 15 pointers [2 "A" level passes, and B; 3 "A" level passes]. So that's a good student that we are taking already. So that even if you are inexperienced teachers, the quality will still be average because the student is a hard working student, a very intelligent student. Eh.. the other issue is the use of part-time lecturers. Well it has its own problems but for us it has worked very well because we are getting guys that have resigned from the university, they are now working in the banks. Eh.. they have got both*

skill and practice and they are coming in to assist. So the quality has not significantly improved but has not gone down.

The universities' output is mainly graduates taught at these institutions. In research there has been a serious decline in both the quantity and quality of the publications. This situation is attributed to the "brain drain" and the general lack of resources. The universities have not been able to attract and retain senior professors. At the same time there is little capacity to train at the postgraduate level. If universities were able to train at the postgraduate level they could use some of the graduate students to teach undergraduate courses. The Dean of Engineering observed,

But what I am saying is that other than…if we had better resources our research laboratories could be functioning and we could be training our own lecturers in terms of their qualifications as M Phil and PhD holders. We are not in a position to train as much as we would be able to train, as much as we are willing to train because of the inadequacy of resources but we are training one or two people with the limited resources that we have. But it is evident that we have the capacity to train ten times, five times more than what we are doing now. So yah! we have been adversely affected. That is at the departmental level.

Challenges, Cultural change and Institutional Renewal

The theme "change" is a very topical one given the deplorable state of the majority of universities in the country. However most of new universities were

mimicking the older ones in organizational structure and culture making radical change difficult. There were a few innovative ideas that came up in the study. One very popular idea was the sale of courses by departments to raise money. Most of the public universities have introduced what are called "parallel programs." Students admitted in parallel programs pay full tuition fees. The students qualify to enter university but due to competition cannot get a place in the government subsidized programs. The courses taken are the same as those offered in the regular programme. Sometimes the programmes are run in the evenings by the same faculty who teach in the regular programmes during the day. There are constraints arising from regulatory framework. For example, meaningful change is hampered by the University Acts. There was need for change in order to arrest the decline of higher education in Zimbabwe. Most universities have accepted the idea of strategic planning as a way forward. A professor of Biochemistry stated that there was need for cultural change. The problem is the task of changing mindsets. He commented that,

> *Certainly, ingenuity and thinking in other terms is something that we have to realize. In any situation you may not achieve the optimal funding that you need and you have to find out how you can deliver the same concepts, stimulate same ideas but perhaps with different resources and I have observed a number of departments have been able to do this. Eh...and I think in the Faculty of Engineering. Though I think other departments have not quite so managed in their dealings and are just*

looking for a monetary solution. But I think in the last two years we have seen a drive because of the global drive to online resources and facilities, we have seen it. We have been able to match. We have been able to find computers at lower costs. We have been able to overcome that and established the networks that we need for our teaching. What we now need is to bring it practically on board so that they use that network for teaching. In that respect in terms of changing teaching methodologies I think we have been able to move in the right direction. In terms of thinking in other terms we have been able to choose what we want in that respect.

(Interview with a Biochemistry Professor)

Most of the public universities have adopted strategic planning as a way of turning around the situation of decline. The problem is that there is no connection between the individual institutional strategic plans and that of the government, except in the area of capital investment.

Strategic Planning

The majority of public universities have a strategic plan which outlines the mission and vision of the institution. The Ministry of Higher Education has a strategic plan that addresses global issues in Zimbabwean tertiary education. The Ministry's plan indicates further expansion of the university sector by the year 2010. The main objective is to increase access in higher education. More specifically each of the ten provinces in the country will have a public university.

Thus the government intends to establish three more public universities, namely, the Marondera University of Technology, Matabeland South State University and Manicaland State University. It is the government's quest to democratize and increase access to higher and tertiary education and therefore the Ministry's objective is to have in each province at least one state-university, a polytechnic and a teacher's college.

The Ministry of Finance officials referred to what amounted to strategic planning in the new framework. However the ministry had no evaluation methods in place in particular for universities. Previously due to constraints of manpower and many other constraints the ministry would just give money and leave accountability to the universities. The only review that took place was during the next budget allocation process.

> *Our system says what are the key result areas? So each institution has to identify the key result areas....and then we say what are the goals then you have to identify your goals you have to identify the objectives. You have also to identify the strategies, but the most important issue in this process is to say "what is your purpose in life? What have you been set up to do?" Once you are clear about your purpose in life, those who are your clients and their needs for their progress. then you can work on your strategic plan*
>
> (Senior Official, Ministry of Finance)

The Ministry had a section for reviewing the implementation of the budgets but due to manpower constraints the section was not able to follow up work in progress in the universities. The position was being rectified as reported by an official of the ministry.

> *But two or so years ago we set up what we were calling the (ICU) Implementation and Control of Expenditure Unit. This was supposed to be the monitoring arm to precisely do what you are asking, because we realized that we were pouring in a lot of money but by the end of the day it was not very clear what results we are achieving after pouring in this money. So this unit is supposed to go round institution by institution, because of the X amount of dollars this is what you said you were going to do... let us see where you are, what are the constraints or the challenges, how best can we move forward?*
>
> (Interview with a Director from the Ministry of Finance)

The universities have been producing strategic plans and these vary in detail and style of presentation. While there is wide consultation within and outside the universities the impact of such plans on the operation of the universities is not visible. I reviewed the following strategic plans, *The National University of Science and Technology Plan (2001-2005); the Midlands State University Strategic and Business Plans; the University of Zimbabwe Five Year Strategic Plan (2003-2007) and the Ministry of Higher Education Strategic Plan (2005-2010)*

Common themes that emerged were strategies on diversification of funding and a reduction of the dependency on government funding; improvement of educational facilities and conditions of service to attract and retain qualified professors as well as improving the quality of educational outputs. The vision of some public universities is one of being "world class" institutions. This introduces multiple definitions of quality given the simpler definition adopted for purposes of this study. I had argued that quality is "fitness for purpose." In this regard local relevance would be important. The idea of a world-class university brings in other performance indicators, which would pose serious challenges to these institutions. Those universities whose vision is to have relevance in the local context and produce graduates for the local market would have a different challenge and performance indicators. One university stated in its strategic plan that,

> *The institution is confronted with difficulties in the recruitment of and retention of staff especially given the prevailing economic climate. The staff recruited by the university are qualified but by and large inexperienced. Most of the lecturers are young and enthusiastic. However, some lack the necessary research expertise as there is a scarcity of Professors, Associate Professors and senior lecturers among their ranks. Similarly there is need to develop the support staff. The university is simultaneously faced with the problems in its efforts to staff develop owing to its lack of financial resources.*

Another university professor said that from the experience gained in a previous plan the new plan would focus on two issues:

1. one was to maintain relevance to and in society. There was emphasis on satisfying the clients and other internal stakeholders.
2. The second was to diversify as a matter of urgency the financial base if the university was to propel itself into a sustainable future.

The Ministry of Higher Education's strategic plan emphasized capital infrastructure development. The plan leaves a gap in terms of details on human resources development and the needs of the economy. There are no performance indicators that would help institutions adjust programs to suit national needs. On research output one university highlighted in its strategic plan that insufficient funds were being made available in the budget. Less than four percent of the operational budget was allocated each year. However there were other factors that constrained the academic staff. A Professor of Engineering reported,

> *The university fell short of even basic targets that were set for research. However all indications are that even the four percent could not have been effectively used if it had been available, simply because of the unsatisfactory general level of research activity. The constraints that individual staff members experience in trying to do research are many and varied, but might typically include: heavy teaching and administrative loads, lack of equipment, lack of postgraduate students and research assistants, poor library facilities, lack of extensive*

research experience, lack of substantial salary differentials and other rewards to motivate research, and failure to obtain external research funding.

Another university official stated,

The university is operating in a turbulent environment with the macro and micro environments undergoing rapid change. The economic environment is uncertain as the structural adjustment continues under policy guidelines from the economic recovery programme. There is high inflation, slow growth and there is need to limit public expenditure. Both the private and public sectors have been constrained by foreign currency shortages and therefore very little expansion is taking place.

(Interview with a Deputy Bursar Planning)

A Deputy Vice-Chancellor from one of the older universities explained that one of the problems was that the planning process was flawed. He said the majority of the academics did not participate in the formulation of strategic plans. Their input was restricted to the programs which the lecturers taught. In other words the formulation of strategy was left to a committee. On the question of participation in the planning process, a Professor of Education said,

No as lecturers we don't participate in these. Although I think there is a committee that is called a "planning committee" of some sort. Eh.. so there should a representative from the lecturers. I am not sure about it but I don't think as individuals or as academics we are involved in planning and budgeting. Yah...I guess so it's a gap because we are the

ones who are at the shop floor level of the institution and we know the needs of the faculties. These are the needs that affect us. If we are involved in say, planning and budgeting, I think there could be some improvements in the distribution of resources. If suppose we had a representative of lecturers then he would be able to or she would be able to channel our needs to the administration

Lecturers are aware of the existence of strategic plans in their institutions. However they were sceptical of the value of such plans. The respondent added,

Yah, I heard that there was a strategic plan that was circulated around I think in 2000 or 2001 or 1999 that time. Well people read through those documents. Sometimes they don't read the documents. But when it comes to planning and budgeting as you were saying, I don't think it was included in that planning process.....we just made an input on the teaching part, that is in the programs.

Asked to comment on whether there was a link between resource allocation methods used in the university and the strategic plans a Chair of the Department of Accounting said,

The expiring strategic plan, that's just expiring now. Eh... was not being taken seriously by our university. As a result of that there is no reference made to it because there is supposed to be a correlation between strategic objectives in terms of their ranking and resources allocated to

those initiatives but that is not being done. May be the money is not enough but no attempt is being made in that direction.

One of the purposes of strategic planning is to protect the institutions from unpredictable conditions in the environment, such as financial cuts. The institutions come up with strategies of survival. It would appear that some of the institutions did not engage the concept correctly but instead were just doing the traditional long range planning. The Chair of the Department of Accounting responded,

That would be the ideal if the strategic plan is a document which people are using to plan with. But I think ours has a problem. I think from inception even up to now. May be the planning period we are getting into now will be taken more seriously than the expiring one.

Consolidation

There is need to consolidate the quantitative gains in access by providing more funding to those institutions that are already on the ground but this needs political will to implement the policy. The government was already investing a lot of money into higher education but the funds were having less impact because they were thinly spread among many institutions. The growth and expansion was huge yet the revenue base remained small. A ministry official explained,

So perhaps what we need to do before we can expand as my colleague was saying is to consolidate what we have. If you look at what was

happening in one old university until the latest interventions it was very sad. The infrastructure had completely collapsed. So I think we need to be very careful with our policies of expansion.

The government is thinking of allowing the private sector to come in and set up universities. There may be other organizations that would wish to set up their own universities.

What we need is to create an enabling environment for private sector or whatever whoever wants to set up a university. But I think for the state ones we have to start by consolidating what we have. Make sure that we offer first class education with all the relevant facilities in place before we can start adding more and more state universities. Because if we continue this expansion programme, I think when I first came here they were talking about .....It means that eh.....we will never be able to do anything, it will be a university in name. There is no effective teaching because there are no adequate resources. That doesn't help anybody.

Some of the professors were confused by the way government was planning university expansion in the country. On the establishment of the many new universities all at once, one lecturer observed,

Well! that one, I don't even know why they are doing it. If you cannot even make one university function properly... it is a controversial one. Yes we need more universities but the one that is there is failing so why have more. Like in a previous conversation, why cant they pour resources and move this one or two universities to completion....Have a

few excellent ones and then when they really get consolidated you can dissipate your energies to other satellite universities. It is like spreading your resources too thin.

In the interview with one official from the Ministry of Higher Education it was noted that there were only three provinces out of ten that were without a university. The needs for providing access were driving the expansion however there was some doubt about the efficacy of such a strategy. One respondent indicated that there was a dilemma. She commented,

Okay, But what is the point? Okay I appreciate the logic that you have to make education accessible and to have everybody feel that they can access higher education. But you know with an environment of dwindled resources is that really the best decision? I don't know. I don't think so. (Interview with the Dean of Engineering)

The respondent did indicate that the situation could have been handled differently. He suggested putting more money into a few institutions to increase their capacity to enrol more students. But as one official from the ministry of financed explained cabinet has the prerogative and uses other criteria for such decisions. There is obviously very strong impact from the political end on the institutions. Some very useful investigation such as the Nziramasanga Commission report which made some very strong recommendations on the way forward in education in the country have not been implemented despite being

commissioned by the president himself. Education in Zimbabwe is certainly politically driven.

The current economic and political situation in the country poses great challenges for reforming higher education in Zimbabwe. The new levels of investment in higher education require huge amounts of financial resources that are beyond the country's means. The assistance of the external co-operating partners is an obvious way forward but remains out of reach as a solution due to the country's political image. With so much corruption having taken root during the period of economic decline it will be some time before the situation gets back to normal, if ever. The country has abandoned its on local currency in a bid to fight the hyperinflation. The currencies in use are the US dollar and others such as the South African Rand and the Botswana pula. Unfortunately there are not many people who have access to this foreign currency. Even the central bank has not got the resources for paying professors salaries. The government has therefore introduced the payment of fees in US dollars. The consequence is a huge drop in student enrolments at universities.

SUMMARY

The study sought responses to questions on how government resources were allocated to the universities and within the institutions. It also solicited information on the professors' perceptions regarding the impact of the allocation methods on their work. In addition information was sought on how staff coped

given the level of financial resource at the institutions. Finally, the study sought information on strategies for turning around the situation of decline being experienced by the universities.

From the above analysis there were several findings ranging from government policies, to institutional policies. The main themes are summarized in Table 5, below.

TABLE 5: EMERGING THEMES

Theme 1: Government Policies Funding and cost sharing Performance management
Theme 2: Institutional governance policies Organizational culture Academic Leadership Workload
Theme 3: Funding and other Resources Financial diversification, specifically, Engaging Donors, Commercialization of courses, In come from farming, Consultancies and Private sector contributions.
Theme 4: Barriers to Faculty Performance, e.g. the work load, Personal considerations and commitments
Theme 5: Institutional strategies e.g. Incentives and motivation
Theme 6: Quality of Graduate and Research output
Theme 7: Cultural change, Institutional renewal through strategic planning and policies for consolidation

DISCUSSION

Government Policies

In the area of government policy and the funding of higher education one of the findings is that the model used in Zimbabwe is outdated. In an earlier study, Kariwo (2007) reported that one of the measures government could take was to change the method of allocating funds to universities in line with current trends which focus on performance management. A number of countries in Western Europe and North America and the United States use performance based funding models, however not many African universities have introduced such models. Banya and Elu (2001) discussed the alternative models for the funding of higher education in Africa. They suggested that "private universities" may be the solution. In my study, the evidence for privatization was from the interviews with the officials of the Ministries of Higher Education and Finance. Banya and Elu (2001) noted that many of the universities in the sub-region face formidable problems which include increased enrolments and quality issues. While establishing more private universities is a possible way of solving the inadequate funding universities there is evidence in my study that this could create other problems such as elitism in a society that is trying to produce egalitarianism. Bollag (2001) cited the case of Makerere University, which is known to have successfully introduced the charging of fees equivalent to full costs of providing the programs. He mentioned that one of the problems that arose is the exclusion of the poorer students who cannot afford the high fees.

Quality Issues

One of the major concerns regarding quality was the "brain drain". The World Bank (1996) notes that some 23000 qualified academic staff are emigrating from Africa each year, in search of better working conditions. While this figure is global and therefore may not give a clearer picture of national or regional variations, it is clear that there is a net loss from the African continent. The problem is compounded by lack of other resources such as books, equipment and internet access. The low salaries for staff are a major contributing factor to the brain drain. There is a strong pull factor induced by higher salaries and standard of living in the advanced countries. The situation in Zimbabwe is critical and the study by Chetsanga (2002) on the country's brain drain highlights the problem.

Another factor that was cited as impacting quality negatively was the increasing work load of the academic staff. Tight (2009) observed that, generally, there was an increase in the work load. He admits that in his study there were methodological problems in comparing data in surveys done in the UK. The surveys which he used began in 1945. There tended to be contradictions between perceptions and the surveys. The study is important for my research because it confirms some of my findings. In Zimbabwe the increase in the workload is mainly due to increasing class sizes. The demands for research are less because most the new universities have tended to focus on teaching. Tight reported that the increase in the academic work load in the UK,

was due to higher staff student ratios. In addition there were increasing administrative responsibilities assigned to the academics particularly at the older universities. The demands for research were also quite high, at the research intensive institutions.

Allocation Models

There are some studies that focussed on resource allocation at African Universities (Chika & Ojogwu, 2007 & Olayiwola, 2010). Chika and Ojogwu (2007) observed that there was a weak formulation of education policies and also the implementation was problematic. One of the key questions that they asked was on the proportion of the budget that was allocated to Education and whether the money was well utilized in terms of accountability. They found out that 97 % of the respondents said that the money was not utilized efficiently. This finding is supported by some of the findings from my study. I discuss in efficient usage of funds, for example, the perks that were introduced for senior administrators and the senior academics such as Deans. With judicious planning the scarce resources could go some way to provide essential requirements such as books journals computers for use by students and the Professors.
Liverpool, Eyesini and Opara (1998) observed that formula budgeting was critical to increasing efficiency at African universities. Their study focussed on the Nigerian system of public universities. They argued that university budgets and actual results have not been balanced partly because the way universities planned and budgeted. They stated,

Formula budgeting presents an attractive option for developing countries as it reduces substantially the dependency of funding decisions on political considerations and allows for a fair, equitable and transparent disbursement of funds.

In this study there was evidence of government dictating where the funds should go. For instance the government determined how much was to be spend on capital projects compared to the operational expenses. It is common knowledge that if government is providing the funds then it should have a say in the way the money is to be used. This might explain the reluctance by many African governments to devolve completely the decision making process on the public funds that the universities receive.

In the area of research funding, Olayiwola (2010) observed that the money allocated to research in Nigerian universities was inadequate. He suggested that there be new structures created in the higher education system to deal with the allocation of research funds. He recommended the adoption of research councils similar to the UK system. While this suggestion might work in Nigeria, other countries may need a local solution. Olayiwola reported that the funding problems for the universities were partly caused by the need to expand the system to increase access. However there was no significant increase in public funds to support the expansion. In my study, I mention the proliferation of universities in Zimbabwe that started after independence. The government has been unable to fund all the new universities adequately despite diverting funds for recurrent expenditure for the provision of infrastructure.

Income Generation

There are a few success stories of income generation by universities. The experience from Zimbabwe is that generally these institutions have not done much. In other countries some success has been recorded. Bollag (2001) reports on the successful story at the University of Makerere. Lindow (2010) observed that the University of Obafemi Awolowo, in Nigeria, managed to turn around its situation of decline by approaching the alumni for funds. This example supports some of the findings and recommendations in this study. Lindow reported that ten years ago the Nigerian university of Obafemi Awolowo had dirty and tattered buildings with broken windows, leaking roofs and peeling paint. This was an outward sign that their budgets had evaporated and the facilities crumbled." (p A 24). However, the university is now one of the most beautiful in Africa because of its architecture and horticultural diversity.

In the next chapter I present the findings from the study. I also discuss the conclusions I reached and the recommendations as well as strategies for implementation.

CHAPTER SIX

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Several findings emerged in this study and range from major systemic reviews involving government policy, such as funding mechanisms, the legal instruments that universities operate under, to problems at the institutional level that affect the performance of professors. The study confirmed that there is a direct relationship between funding and performance of institutions. However the relationship is more indirect with professors who are influenced by other factors such as departmental culture, academic leadership and the quality of students entering a program

The Impact of Government Policies

The higher education policy framework has become very fluid and is fraught with contradictions. In brief, it is highly politicised. The study reveals that the policies from government are not always consistent and clear. There is no consolidated policy document to guide universities in their planning. For example, the higher education strategic plan does not contain information which universities could use to come up critical areas in programs and human skills development. As a result individual institutions produce their own plans and an examination of these plans shows many examples of duplication of programs and activities. A senior government official said, "*It is very difficult to have a clear policy*

document because of the volatile situation the country is operating under. In the majority of cases Ministers and other government officials announce government policy at rallies or party meetings.

(Director in the Ministry of Higher Education)

The Problems of the Current Funding Model

The resource allocation process is cumbersome and needs to be reviewed. To compound the problem, the institutions do not know how their subventions are calculated by Treasury even though they are involved in negotiations on the basis of which Treasury makes the final decisions. There are striking differences between the university allocations that cannot be explained by enrolment figures. In general, this budgeting process makes it difficult to engage in long-term or strategic planning. There is reduced funding so that the funds provided by government are far less than the bids from the universities. Much more serious is the fact that the increases are far below inflation levels. The country is experiencing hyperinflation. A Deputy Vice Chancellor said,

> *The trouble has obviously been living in an inflationary environment. The initial allocations, if they are given at the beginning of the year, can be used very expeditiously. In the last financial year the allocations have been coming at a very slow pace so that their value six months later was much less thereby impeding development on campus.*

The negotiations for university budgets are done by civil servants who are not well informed regarding the needs of the institutions, although they are competent finance personnel. The university that has a Vice Chancellor who can lobby the Ministry officials successfully and prepares a good case can receive a better allocation. In other words, financial decisions may not necessary be made on hard data. The budgeting is annual and therefore planning is short term. Strategic planning becomes impossible given the short horizons. Absence of a database to provide a holistic picture of the university baseline data is essential for resource allocation.

Brain Drain and the Quality of University Education

Professors are working under very difficult conditions because of the economic down turn. They are experiencing economic, social and psychological pressures which impact negatively on their work. One of the greatest problems facing universities is the brain drain. There is evidence from this study of departments closing and others operating at less than half the capacity due to shortage of professors. In a number of universities there are some very junior staff teaching and having administrative responsibilities such as dean or chair. There is no doubt that the quality teaching and research is affected negatively.

If investment in people by the Zimbabwean government was considered a viable proposition for development then the impact of the

"brain drain" must have worked against it. The emigration from Zimbabwe has continued to increase as the economy declined. The human resources losses are from both skilled and unskilled personnel. However the impact on the country's universities has been catastrophic. The universities are unable to attract staff or retain those lecturers who they employ currently. Many academic staff have emigrated to the neighboring countries of South Africa and Botswana. The Chetsanga report (2002) shows that the country has been losing skilled people, in large numbers. Because the brain drain has resulted in most senior professors seeking employment in neighbouring countries and even abroad, the net result has been loss of academic leadership. Young lecturers cannot benefit from the experienced professors in the designing of courses and the execution of research projects. This development was not anticipated when the policies on widening access were put in place.

The Coping Strategies of Professors

A number of strategies emerged from the study. One was the use of the internet for research. While there were limitations in the capacity of institutions to buy enough computers, any access to the internet proved a very important connection with other universities and virtual libraries. In that way the isolation that would have constrained the work of professors and students was avoided or reduced. Another strategy was to engage in collaborative research with other institutions within the country and in the region. In this respect South African universities

proved great allies. A third strategy was to get involved with consultancy work from companies and government. Some universities were using facilities at companies such as laboratories for student training under attachment programs.

A fourth strategy was on surviving the harsh economic conditions given the poor salaries. It was locally termed "Moonlighting." Professors engaged in all kinds of non academic jobs to earn additional income for their families. This arrangement did not always work to the advantage of the institutions.

Revitalization of Higher Education

There was evidence of waste in the allocation of the scarce resources. Allocation of funds to non-core activities continued despite the reduction in government funding. Universities would buy expensive vehicles for staff rather than computers and books. The justification was that they needed to attract key staff. In reality what academic staff and students wanted for effective teaching and learning was more support by way of recent journals, research funds and reasonable salaries or student stipends.

However another major finding was that the turn-around of institutions would depend on leadership, administrative and academic, and engagement with strategic planning at both the institutional level and the national level. However the quality of leadership is not strong

enough to meet the current economic challenges. The appointment of vice- chancellors is not based on the ability to generate income but rather consideration was more on political allegiance. Those institutions that have managed to introduce an entrepreneurial approach such as the sale of courses and programs are managing to survive. Following the success of parallel programs in Uganda, some public universities in Zimbabwe adopted the scheme and have successfully increased the income from fees. The government should provide clear guidelines on the use of parallel programs because at the moment individual institutions have different policies. The evidence from Uganda is that the scheme can become elitist with only those who can afford accessing higher education with lower admission points

Coordinating Higher Education Strategic Planning

With practically all funding coming from the tax payer universities are not insulated from fluctuations in the national economy. Public universities have been adversely affected by a declining economy, characterized by hyper-inflation, a shortage of foreign currency within the context of a weak national policy environment. There is a very intricate connection between level of resources, national economic performance and the performance of professors amongst other factors. The study was done at a time when the economy of the country was declining. The country is experiencing hyperinflation and most

goods and services are no longer available. There is actually a crisis of deep proportions making higher education unsustainable. The irony and therefore the challenge is that higher education is needed for national development. However government no longer has the money to support higher education institutions yet more universities are being established. The universities are underfunded and the quality of education is declining. The essential resources for teaching and research are inadequate at the majority of the public universities in the country given the large enrolments. The net result is that the quality of research and teaching has been compromised.

CONCLUSIONS

After examining the evidence in the transcripts I drew a number of conclusions. First, it was evident that the method of allocating financial resources by government was lengthy and cumbersome. Universities waited long periods before receiving their funds, after budgets are approved by Parliament. Therefore in theory, the money would have been provided after Parliament approves the budget, but in practice there were cash flow problems. Even the quarterly cash disbursements were not made in time to the institutions.

Second, there was internal misallocation of resources. The evidence cited included allocation of resources to non-core activities and items. The evidence cited was that of the expensive perks that were

awarded to some of the university personnel. Some of the side effects of such misallocations were the strike action by the academic staff to press for better salaries. Overall the study concluded that the academic staff were operating under very conditions in terms of lack of resources.

Third, through the study I was able to indicate that the quality of education was being affected. The extent of the impact varied between institutions. It was not possible to get conclusive evidence on the level of the quality given that the nature of the study was qualitative and examined perceptions of the participants.

Fourth, the study confirmed that the "brain drain" is a serious problem. At some of the universities departments have been closed and some programs were no longer being offered. The class sizes were increasing because of the remaining staff had to teach more students.

Finally, I concluded that strategic planning was essential in the revitalization of the institutions. There was evidence from the government officials and the universities that strategic planning would provide a more holistic framework for the funding of the university sector.

RECOMMENDATIONS

At the system level the government needs to address a number of policy issues. The challenge is that at present there is a government of national unity between the ruling party ZANU- PF and the opposition party, the Movement of Democratic Change (MDC). The two parties have very different views on the political and economic frameworks to be adopted. The recommendations in this study are made on the assumption that a new political dispensation will soon be in place in the country.

Crafting a New Policy Framework

A new policy framework for higher education is a necessary condition for recovery and stabilization. Issues to be addressed include access to higher education and quality in the establishing of new higher education institutions that are publicly funded. A more flexible approach in the regulatory framework is needed to enable institutions some space to generate income for their development and capacity building. More specifically are issues of staff recruitment and retention that need to be resolved.

The University Acts which are the legal instruments for the operation of state universities need to be reviewed in the light of the changing environment. The new Acts should provide more flexibility in

terms of income generation and the utilization of university generated funds. The university acts need to be reviewed and consideration given to the value of current council membership and the appointment of chancellors and vice-chancellors, who are key officers in driving change in these institutions.

A more flexible approach in the regulatory framework is needed to enable institutions some space to generate income for their development and capacity building. More specifically is the need to allow flexibility in salary management to allow universities to come up with innovative packages that would facilitate staff recruitment and increase staff retention rates.

A New Funding Model

The government should address the issue of funding as soon as possible given the critical situation in universities regarding the shortage of resources such as books, journals equipment, building facilities and staff. The government needs a much more objective method for allocating resources and this would increase transparency and efficiency in resource allocation at the system level. A formula-based method of resource allocation would be the first step before performance-based funding is introduced. There is need for clearer direction from the higher education ministry on the proposed new performance management system. At the moment the there are no performance indicators that have been worked out.

The government currently uses a negotiations-based approach with individual institutions to decide on the budget for the year. The figures arrived at are then incorporated in the Ministry of Higher Education overall budget. The method has worked well in the past because for a long time there was only one university and a few colleges. With the recent expansion of the sector, which now has over eight universities, several vocational and technical colleges and teacher training colleges, a review of the approach is now necessary.

A Strategic Planning Framework for Higher Education

Consolidation of current institutions in terms of funding is highly recommended because that will enhance output. This can be facilitated by a strategic plan that is driven centrally by the Ministry of Higher Education. This role can be delegated to the Council of Higher Education. A full audit of the institutions' needs would be the starting point in order to establish baseline data. The government policies on higher education need to be spelt out clearly in a comprehensive document linking the government strategic plan and the university strategic plans. This framework should form the basis of funding universities. The Council of Higher Education is in the best position to conduct the audit and should be mandated with this responsibility.

Increased Public Funding and Consolidation

There is urgent need to take immediate action to address the serious under-funding of all state universities in order to restore the vibrancy of these institutions. There is need to halt the establishment of further new universities that are funded by the state and focus on consolidating the current ones which are still incomplete or in need of more funding to sustain their operations.

Investment in Information Technology

The government and institutions should allocate more money for Information Technology. Because of the information gap between the developed and developing countries there is evidence that use of the internet can bridge that gap (Brown 2003). Using this approach faculty and students would be able to conduct meaningful research by accessing recent journal and scholarly articles. There are now many opportunities of accessing information using the internet. Increasingly books and journals are available on line. Universities in Zimbabwe should concentrate on increasing internet access for staff and students rather than constructing huge buildings. The virtual university is going to replace the traditional university where students and staff gathered in libraries to research.

Alternative Sources of Revenue Generation

The main source of university funding will remain the government. However the increased emphasis on realist tuition fees will

improve the financial situation of public universities. The sale of courses by some institutions has proved successful in supplementing government funding. The only concern is that it may restrict access for those who cannot afford. The universities and government need to work with the private sector in generating revenue. There is great potential in such a partnership. The down-side would be that companies are also experiencing a decline in business due to the current economic meltdown.

Increased Efficiency at Government and Institutional levels

There is need for improved efficiency as noted from the interviews with the professors and officials from government. Some respondents cited a lot of wastage in the management of resources. Other respondents made reference to the recent acquisition of new vehicles worth millions of dollars for use by senior university administrators. This is despite the fact that the universities do not have more recent library books, enough computers and in some cases there are no laboratories and modern equipment. The universities need to start by involving themselves in hard choices. The government has in principle agreed to devolve financial control of income earned by universities to the institutions but the leaders of these institutions should show accountability. The ideas on the proposed performance management policy for universities from government had not been

implemented at the time this study was completed. Therefore I cannot include them in my recommendations and conclusions.

Engaging the International Community

The Zimbabwean economy is in a crisis and therefore funding higher education becomes problematic. One suggestion on the way forward, would be to engage the international community for assistance with funding and the recruitment of highly qualified staff. As part of this process the diaspora could provide a solution. There are many Zimbabwean scholars in the diaspora who are willing to return to the country given the right salaries and academic support. One way to arrest brain drain is to improve the economic well-being of faculty. For example, in order to address the issues of strikes and general working conditions of staff there must be set up a negotiating forum consisting of representatives the academic staff, the ministry of higher education and the ministry of finance. The forum must have power to effect resolutions within the confines of a given budget. This is one way of retaining staff. The universities must engage government and other stakeholders to work out schemes for arresting and reversing the current brain drain.

Strategies for Implementation

In the paragraphs above I made some recommendations which entail some major changes to the current structure of higher education in

Zimbabwe. To conclude this section I am putting forward some suggestions on how the changes could be implemented given the chance. I must highlight that changing policy is a complex process (Kariwo, 2008). It involves interaction between all the stakeholders. In this study I identified the following interested parties; government, political leaders, the university community, donors and the international community, the private sector and NGOs, as well as parents. In order for everyone to buy-in to the proposed changes, it is necessary to convene a major conference for all stakeholders, on rebuilding Zimbabwean higher education. The Council for Higher Education should be given the responsibility of convening such a conference. The Council is strategically placed to coordinate the higher education sector which now comprises of 14 universities, a couple of Polytechnics and several Colleges. As a first step, I would approach the Minister of Higher Education and the Permanent Secretary to present the findings in this study. There is need to get political support in a major reform of this nature. But also policy implementation is usually left to bureaucrats (Pal, 2006) hence, it is important to harness the support of the Permanent Secretary in the Ministry as well. Kariwo (2008) observed that policy change in an African context differs widely from the western approach.

> African democracies, regardless of public claims are usually closed systems. They are modelled on the traditional way of governance where the chief ruled with advice from a team of elders.....At the

> end of the day policy is what the head of state or the "chief" sees as the way forward (p.170).

The conference would deliberate on the key recommendations and then assign the adopted resolutions to working groups that carry out specific implementation tasks. Because of the magnitude of the reform required, it is important to have periodic monitoring by a designated committee or group.

In the next chapter, I present my reflections on the study and conclusions to the dissertation.

CHAPTER SEVEN

REFLECTIONS, IMPLICATIONS OF THE STUDY AND CONCLUSION

After considering the production model as a theoretical framework I was able to reconceptualise the funding model for Zimbabwean universities in a more holistic manner. I illustrate the model in Figure III below. I believe that the total involvement of all stakeholders is crucial for the revitalization of the institutions. In Zimbabwe there is evidence of emerging and increasingly vibrant African entrepreneurs who can be enlisted as potential drivers of technology and innovation. If I were to repeat the study I would also use post-colonial critique to enhance the analysis. This is because of the historical development of Zimbabwean Higher Education, which has both colonial and postcolonial phases. The postcolonial critique emphasizes a reframing of the higher education system to create a new and relevant "African University." Kapur and Crowley (2008), state that developing countries should rethink their higher education systems. Higher education is critical to the building of human capital, which in turn builds the very institutions which are regarded as indispensable for development. I find that postcolonial theory provides a better framework for my study because this lens of critical theory addresses the issues of self- identity and the relevance or irrelevance of colonial education. Said (1978) advanced the idea that "social scientists can disregard the views of those they actually study- preferring instead to rely on themselves and their peers." Most postcolonial scholars argue that the aim of post colonialism as a critique is

to combat the residual effects of colonialism. However the problem faced by many higher education systems in Africa is that many of the assumptions and philosophical underpinnings have not changed materially from those left behind by colonialism. Wyk and Higgs (2007) explored the idea of *Ubuntu,* (The Africaness of an African) as a possible philosophical framework for the African university. This is because there is a void on African ontological frameworks which are necessary to underpin the idea of an African university. Wyk and Higgs observed that,

> The call for an African University may thus be viewed as a call that insists that all critical transformative education in Africa embrace an indigenous African worldview and root their nations' educational paradigms in an indigenous socio cultural and epistemological framework. (p. 63)

In the wave of anti-colonial thought, Fanon says, "the Third World ….faces Europe like a colossal mass whose aim should be to try and resolve the problems to which Europe has not been able to find answers' (Fanon 1965; 6). For Africa this been mere rhetoric as many of the countries still present a colonial approach to education and development despite much anticipation for deconstruction at independence. I believe that Africa still has to grapple with global influences even in the postcolonial era.

The Intellectual Dependency Theory (Peet and Hartwick, 1999) states that the economic hegemony of the West has been paralleled by academic dependency

in which Third World intellectuals trained in Western knowledge, speak colonial language, and stress the history of the colonizer over that of the colonized. This notion has been the bone of contention by the African leaders. I make reference to Nyerere, the former president of Tanzania and Kwame Nkurumah of Ghana who are two renowned African philosophers. Kwame Nkurumah advocated a true developmental African university rooted on African soil. He said the university once planted on African soil must take root amidst African traditions and culture. Nkurumah (1965) said, "The essence of neo-colonialism is that the State which is subject to it is, in theory, independent and has all the outward trappings of international sovereignty. In reality its economic system and thus its political policy is directed from outside" (p. 1).

Nyerere's idea of education and development was based on self-reliance. While his concept of villagization was less successful in Tanzania because of the demise of Socialism, it remains an educational philosophical foundation for Africa. Until African countries can stand on their feet and stop using the begging bowl they can never be truly independent. In defining the role of the university Nyerere said that in all its research and teaching the University of East Africa must be searching always for that elusive thing—truth. It is in this manner that the University will contribute to our development, because the fight against prejudice is vital for progress in

Speaking as the first Chancellor of the University of East Africa, newly created from colleges in East Africa that had been incorporated in a colonial special

relationship with the University of London, Nyerere, (1963) warned against the elitist, isolationist stance of such an institution of higher learning,

> For let us be quite clear; the University has not been established purely for prestige purposes. It has a very definite role to play in development in this area, and to do this effectively it must be in, and of, the community it has been established to serve. The University of East Africa has to draw upon experience and ideas from East Africa as well as from the rest of the world. And it must direct its energies particularly towards the needs of East Africa (Nyerere 1963: 218-219).

The message at independence for many African countries was loud and clear regarding indigenization. However the message has been a far cry as much of the vision turned into mere rhetoric.

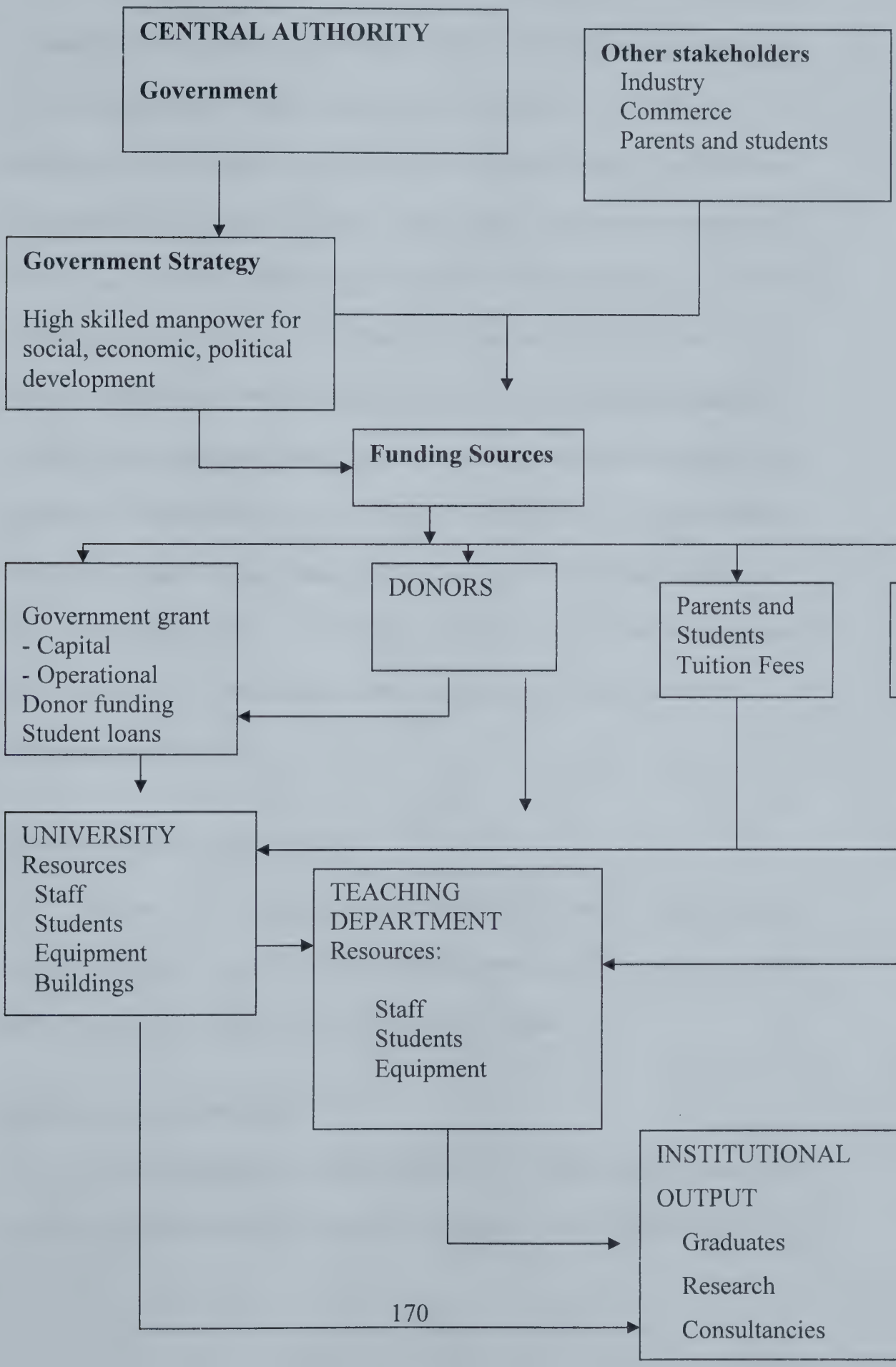
The study took me on a journey that was complex because of the sensitive political situation in the country. When I completed the investigation, I felt a sense of accomplishment because the journey has taken some years. I had always wanted to satisfy my curiosity regarding the way universities function in particular those institutions in developing countries. I had also wanted to write something that could be used in planning and managing universities.

I worked in two public universities in Zimbabwe for many years, but as an administrator. I found the divide between administrators and faculty an interesting one. Now that I have completed this study I am more enlightened about the debates. I understand why professors feel that administrators are more

concerned about bureaucratic processes. On the other hand I also have better insight into what drives faculty in their profession. I believe it is something more of intrinsic where as administrators tend to consider the balancing the financial books as more important.

From the literature and the field work, I was surprised by the complexity of university operations, ranging from politics and governance, down to interpersonal relationships. I was really moved by the kind of commitment that professors have for their work despite the economic hardships. Not everybody is jumping ship. There is a sense of vocation in many who have decided to stay. I was also surprised at the resilience of the older universities that are still producing some graduates of reasonable quality

FIGURE III: RECONCEPTUALING HIGHER EDUCATION FUNDING IN ZIMBABWE



I learnt a good deal in the process of trying to uncover the underlying causes of decline in universities in Sub- Saharan Africa in general. Before I enrolled for this study I spent more than twenty years in university administration. Through the study I discovered that a divide exists between administrators and faculty in the way they perceive university operations. If I were to get a job now, either as a professor or as an administrator, I would be in a better position to handle the tensions. This research has taught me to see beyond institutional policies and their implementation. It exposed me into the intricacies organisational theory. I now know that there is much more to the theoretical understanding of the environments relevant to the way we manage institutions under financial stress. It's not just about balancing the books. I found evidence of some very frustrating and stressful moments for professors. I hope that policy makers will take time to reflect on the study and take appropriate action.

Implications for the Study

There are several implications arising from this study. The investigation indicated that there is contribution to knowledge and practice as well as to policy formulation at both the institutional and national levels.

Contribution to Knowledge

This investigation is the first of its kind in Zimbabwe as confirmed by many of the interviewees. The study is significant in that it fills some of the

gaps in the knowledge on the impacts of resources on the performance of faculty in African universities. There has been a tendency to consider performance of faculty from a Eurocentric perspective. There is such a paucity of literature about how professors at African universities manage their teaching, research and service responsibilities given the meagre resources. Much of the literature is from the contributors to the World Bank publications and has its own biases. The use of Institutional Theory, the Resource Dependency Theory and the Production Model in analysing data in this field is a new development that will build on the theoretical bases for analyses in higher education within Sub-Saharan countries. The study will therefore benefit professors, researchers as well as students and other scholars interested in policy issues around the financing higher education, using lenses from developing countries, particularly from Sub-Saharan Africa.

Implications for Further Research

The questions that I started off with were answered from the literature review and the interviews that I conducted. However a number of gaps were identified during the course of the study. The first area needing further investigation is the use of strategic plans by both institutions and government. While there is evidence of strategic plans at the national level as well as within the universities there was no clear link between these plans and allocation of resources. Further research would throw more light as to the value of such plans in resource allocation. Another gap existed in the organizational structures and

data for evaluating the performance of institutions to increase public accountability. There were plans to use the Council for Higher education as a monitoring body but there is need for baseline information that the Council would then use in planning and evaluation.

A number of questions remain to be answered in this whole debate of funding higher education in Zimbabwe. For instance, what is the potential of private universities in providing a solution to the current demand for higher education? Can the contribution by government ever be reduced to the same levels as countries of the "North" given the poor economic performance in most Sub-Saharan countries? What is compounding the problem is that the trained graduates leave for greener pastures soon after completing their degrees. The impact on the economy is quite negative. Should the country continue to make such huge investment when the benefits accrue to the individual and other economies? The trends elsewhere show that higher education has been cutting down on bureaucracy, decentralizing decision making and trying to reduce costs. The role of higher education administrators has been transformed to that of creating strategies rather than managing the work of academics.

There is need for investigating the value of strategic planning given the absence of a direct link between the university plans and the ministry of higher education strategic plan. Most public universities have a strategic plan but its present value remains at the institutional level.

From the point of view of contracts of employment and who was responsible for staff working conditions there were gray areas that respondents

reported and which need further study. This would be covered under a general review of the parliamentary acts governing public universities. Finally, it would be interesting to do a comparative study of public and private universities to determine the impact of resources on faculty performance. The study should add to the current debates on the funding of higher education because the sources of funds are different and also the organizational frameworks tend to be driven by different philosophies.

Implications for Practice

The study reveals that there are more recent models on resource allocation, which Zimbabwe could adopt to enhance the performance of its higher education institutions. There is a general drift towards performance based funding in many countries. The evidence emerging is that such a model motivates staff more than the historical methods of budgeting. This study has implications for government policy makers, who need to take into account the phenomenal expansion in higher education that has been going on since 1999. It has serious budgetary implications. The study shows that there is need to have a clear policy formulation and implementation strategy for higher education institutions in Zimbabwe.

In the study I established that universities were under-funded, the implications are that the institutions are in danger of being destroyed. Therefore the university community must continue to press government for capital, operational and research funding. They should also use their expertise to generate revenues independently from government. By increasing their income

they also increase their autonomy. In Chapter 2, I described how the national economy was not performing very well, hence posing a greater challenge to the universities for fund raising.

CONCLUSIONS TO THE DISSERTATION

In this study, I set out to investigate the impact of resource allocation methods on the faculty at public universities in Zimbabwe. In Chapter 6, I presented the major findings, conclusions and recommendations. Broadly speaking higher education in Zimbabwe is in a critical state and requires substantial investment to restore stability as well as ensure quality. I investigated a number of questions and concluded that there was under-funding of institutions leading to inadequate facilities and in turn inhibiting the institutions from optimal performance. Funding sources and mechanisms have a powerful impact on the way resources are used and also on the performance of institutions as well as of the individual staff.

While in general, faculty were familiar with the resource allocation process from government to the institutions and within the institutions, there were some faculty who felt the process was not transparent enough in the times of shortages. The seniors administrative staff in some of the universities, such as the Vice- Chancellor, Bursar and Registrar, tended to priorities non-core activities rather than putting more resources into teaching and research. It was also noted that faculty are operating under very difficult conditions because their salaries were low given the hyperinflation in the country. At work they do

not have adequate facilities for teaching and research. As a result the quality of university graduates was perceived to be declining by some of the participants. At the same time research output was very low.

The funding of higher education in Zimbabwe does not reward performance and consequently, institutions continue using the historical methods of budgeting. The government had plans for moving on to performance based budgeting but these plans were yet to be implemented. As the government plans to change consideration should be made on introducing a combination of negotiated budgets using strategic plans from the individual institutions and formulae. In that way the government will be adopting a more objective method of allocating resources. There is evidence of quantitative gains in the access to higher education although limited access still exists for groups such as the women, the disabled and some rural students and those from a poor background in urban areas. Currently demand exceeds supply and many students have to go to neighbouring countries or abroad for university education.

The private sector has the potential to make a significant contribution to financing education in public institutions. This is one area where institutions can establish new partnerships. The private sector has however been supporting education mainly in the area of skills training through short courses. It has made scholarships available to students at public institutions who are likely to join the private sector labour market. There is need for a new policy framework that would usher in radical change in Zimbabwe. The overall framework should address the education sector, which is in dire need of financial, human and other

resources. There should be focus on quality and relevance. The education in Zimbabwe is no longer leading to national development. The education has to be anchored within a new framework that has political and cultural stability and relevance in the country. A number of measures are to be put in place such as a more flexible policy framework for institutions to enable them to fundraise and use the funds for quality enhancement.

The government and universities must work out a framework for rational state funding of the universities. The university Acts have outlived their purpose and need to be replaced by more flexible instruments that allow for entrepreneurial approaches by the institutions. The leaders of these higher education institutions must become more entrepreneurial, cost-conscious and profit oriented. Zimbabwe's quantitative gains in education have largely been eroded by brain drain. The country has virtually been training and developing human resources for other countries. A full audit of the losses of professors would be one way forward of reviving the universities. The policy of establishing new universities in each province when the current ones have inadequate facilities has to be reviewed. The new strategy should be one of consolidation.

From the above analysis, it is evident that Zimbabwe should consider new models of financing higher education. A strong policy framework would lead to more efficient and effective ways of institutional steering and controlling. The country needs new models of income generation and resource allocation and better accountability. In this context, issues that have been

discussed include formula funding, the proper design of a tuition fee scheme and the promotion of private universities as a way of meeting excess demand. The current 'supervisory' role by the state needs to be informed by data on performance.

The laissez-faire approach by governments is untenable (World Bank, 2000b) in a system which is expanding and requires coordination. The costs involved in providing higher education are high, therefore the role of the government in ensuring standards and providing funds is important. Universities are vital institutions for the generation of knowledge and the production of highly skilled manpower. They cannot be left entirely to private and individualized initiatives.

There are many factors that influence the performance of faculty at Zimbabwean public universities. The factors include the level of resources such as funding, qualified staff, equipment and buildings. There are also issues to do with the way institutions are organized and managed at both the central level and the departmental level. The work of faculty is influenced by institutional polices and the culture of each university. In addition the way faculty interact amongst themselves and the kind of personal relationships existing all have an impact on performance. In this study some factors have greater influence than others depending on the institution. In general the impact of inadequate resources is by far the greatest barrier to faculty performance.

REFERENCES

Adams, D. (1993). Defining Educational Quality, *Improving Educational Quality Project*, Arlington. VA, Institute for International Research, in collaboration with Juarez and Associates Inc. and the University of Pittsburgh, IEQ Publication no. 1(1-24)

Afolayan, M. O. (2007). *Higher Education in Post Colonial Africa: paradigms of development, decline and dilemmas*, Trenton, Africa World Press Inc.

Association of African Universities. (1997). *Revitalizing Universities in Africa: Strategy and Guidelines.* Washington, DC, World Bank.

Babalola, J. B. (2002). A reflection of the World Bank education projects in Nigeria between 1965 and 2001.McGill Journal of Education. 37 (2) p 177-192

Banya, K. (2001). Are private universities the solution to the Higher Education crisis in Sub-Saharan Africa? *Higher Education Policy*, 14 p 161-174.

Banya, K., & Elu, J.(2001). The World Bank and Financing higher education in sub-Saharan Africa. *Higher Education*, 42 p 1-34.

Belfield, C., & Thomas, H. (2000). The relationship between resources and performance in further education colleges, *Oxford Review of Education,* 26 (2) 239-256

Berg, B. L. (2001). *Qualitative Research Methodology for the Social Sciences.* Boston. Allyn and Bacon.

Bidwell, C. E. (2006). Varieties of institutional research: traditions and prospects for educational research. In H. D. Meyer & Rowan (Eds.), *The new*

institutionalism in education (pp.33-50) Albany: State University of New York Press.

Blair, R.D.D. (1997) "Financing Higher Education in Africa" UNESCO Eastern and Southern Africa Consultation on Higher Education in the 21st Century. Nairobi, Kenya. 12 Feb, 1997

Bloom, D. Canning, D. Chan, K. (2006). Higher education and development in Africa: Expanding tertiary education would lift growth in Africa. World Bank. Washington D.C.

Bloom, D. E. , Hartley, M. & Rosovsky, H. (2006). Beyond Private Gain: The Public Benefits of higher Education. In James J. F. Forest and Philip G. Altbach. (Eds). *International Handbook on Higher Education.* Pp. 293-307. Springer, Netherlands

Bloom, D.E &Rosovsky, H (2006). Higher Education in Developing Countries. In James, JF. Forest and Philip, G Altbach (eds.) *International Handbook on Higher Education,* pp 443-459. Springer, Netherlands

Bollag, B (2001). An African success story at the University of Dar-es-Salaam. *The Chronicle of Higher Education.* Washington: 47(30) p A53.

Brock, K; McGee, R & Gaventa, J. (2004). *Unpacking Policy; Knowledge Actors and Spaces in Poverty Reduction in Uganda andNigeria.* Fountain Publishers, Brighton.

Brown, M. (2003). *South Africa shows the value of the diaspora option.* Scidev.Net

Burke, J. C. & Modarresi, S. (2000). To keep and not to keep performance funding. *The Journal of Higher Education*. 71(4) 432-453

Burch, P. (2007). Educational policy and practice from the perspective of institutional theory: Crafting a wider lens. *Educational Researcher*, 36, (2), 84-95.

Budget Speech, 2009, Government of Zimbabwe, Harare. (p. 121-123)

Callahan, M. E. (2007). Achieving government, community and institutional goals through measurement of performance; accountability and performance indicators in Ontario colleges and universities. PhD Thesis. Ottawa Library Archives

Cave, M., Hanney, S. & Kogan, M. (1991). *The Use of Performance Indicators in Higher Education*. Jessica Kingsley Publishers, Bristol

Casper, C. A. & Henry, M. S. (2001) Developing performance-oriented models for University resource allocation, *Research in Higher Education,* 42 (3) p. 353-376

Central Statistics Office .(2008). Harare, Government of Zimbabwe.

Chapman, D. & Austin, A. (2002). (Eds.) *Higher Education in the developing world: changing contexts and institutional responses*. Westport. Greenwood Press.

Chideya, N. (1991). Zimbabwe. In Altbach, P. G. *International Higher Education: An Encyclopedia*. London, Garland Publishing. (1) 437-44

Chika, J. A. I. & Ojgwu, C. N. (2007). An appraisal of Globalisation and Nigerian educational policies, *Education*, Chula Vista, vol. 128 (1) 10-12

Chetsanga, C, J. (2002). "An Analysis of the Cause and Effect of the Brain Drain in Zimbabwe". A report for the National Economic Consultative Forum SIRDIC/UNDP. Harare

Chetsanga, C, J. (1995). ``Report on the devolution of teacher education training,`` University of Zimbabwe, Harare

Cohen , L., Manion, L. & Morrison, K. (2000) *Research Methods in education* London, Routledge Falmer.

Craig, J. (1990). Comparative African Experiences in Implementing Educational Policies. World Bank Discussion papers. Africa Technical Department Series. World Bank Washington DC.

Council for Higher Education Act. (2006). Harare Government of Zimbabwe.

Crotty, M. (1998). *The Foundations of Social Research*: London. Sage

DiMaggio, P. J. (1988). Interest and agency in institutional theory. In L. G. Zucker (Ed.*), Institutional patters and organizations* (pp. 3-21). Cambridge, MA. Ballinger.

DiMaggio, P. J., & Powell, W. (1991). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. In W. W. Powell & P. J. DiMiggio (Eds.), *The new institutionalism in organizational analysis* (p 63-82). Chicago: University of Chicago Press.

DiMaggio, P., & Powell, W. (1983). The iron cage revisited, *Annual Review of Sociology,* 48 p. 147-160.

Ezzy, D. (2002). *Qualitative analysis: practice and innovation.* Crows Nest, NSW, Allen & Unwin

Fanon, F. (1965). The Wretched of the Earth, trans Constance Farrington, London: Macgibbon and Kee

Glesne, C & Peshkin, A. (1992) *Becoming Qualitative researchers: An Introduction.* Whiteplains, NY. Longman

Greenwood, R., & Hinings, C. R. (1996). Understanding radical organizational change: bringing together the old and new institutionalism," *Academy of Management Review*, 21, pp. 1022-54.

Gobbels-Dreyling, B. (2003). University Financing Alternatives: the German Example. Higher Education in Europe, vol. XXVIII (2) 165-170.

Government of Zimbabwe, (2003). The *National Economic Revival Program: Measures to Address the Current Challenges,* Harare, Government Printer.

Government of Zimbabwe. (2001) *The Millennium Economic Recovery Program,* Harare, Government Printer

Government of Zimbabwe (1998). *The Zimbabwe Program for Economic and Social Transformation,* Harare, Government Ptrinter.

Government of Zimbabwe, (1991). *Social Dimensions of Adjustment: a program of actions to mitigate the social costs of adjustment*. Harare, Government Printer

Holsti, O. R. (1969). *Content Analysis for the Social Sciences and Humanities,* Reading. Mass.

IRIN. (2003). Zimbabwe: Higher Education, another casualty of economic crisis, A project of the UN Office. Retrieved from http://www.irinnews.org/report.aspx?reportid=46301

Juma, C. (2006). "Reinventing African Universities." *Falmer*, University of Sussex Magazine, 44, Summer 2006: 8-10.

Kamba, W. J. (1982). The University of Zimbabwe from this time on, International Conference papers (Ed.) N. Chideya, Harare Publishing House. (pp 57-58)

Kamba, W.J. (1985). *University of Zimbabwe Five-Year Report 1981 – 1985.* Harare 1986

Kapur, D. & Crowley, M. (2008). Beyond the ABCs: higher education and developing countries. Rethinking and reforming the higher education systems in developing countries. Center for Global Development, USA

Kariwo, M. T. (2007). Widening Access in Higher Education in Zimbabwe. *Higher Education Policy,* 20 (1) 45-59

Kariwo, M. T. (2008). Higher Education and Development in Zimbabwe. A policy analysis In Ali A. Abdi and Shibao Guo, (Eds). *Education and Social development. Global Issues and Analyses*, Rotterdam, Netherlands. Sense Publishers. (pp. 167-179).

Kariwo, M. T. (2009). The Role of Continuing Education in Zimbabwe. In A. Abdi and D. Kapoor, (Eds.), *Global Perspectives on Adult Education.* New York, Palgrave Macmillan.

Kariwo M. T. (Forthcoming). African Higher Education and global education: some perspectives from Zimbabwe. In Shultz, L., Abdi, A., Richardson, G. (Eds). *Global Citizenship Education in Post-Secondary Institutions:* Theories, Practices, Policies. New York: Peter Lang

Kigotho, W. & Bollag, B. (2002). A Tale of Rebirth, *The Chronicle of Higher Education*, Washington DC.

Kurasha, P. (2007). The transformative aspect of open and distance learning towards equity and national brain gain: the Zimbabwe Open University case. Presented at the Conference of Rectors, Vice-Chancellors, and Presidents of African Universities. (COREVIP) Tripoli, Lybia, 21-25 October

Juma, C. (2006). "Reinventing African Universities," *Falmer*, University of Sussex Magazine, 44, Summer 2006: 8-10.

Jongbloed, B., & Vossenteyn, H. (2001). Keeping up the performances: an International survey of performance based funding in higher education, *Journal of Higher Education Policy and Management.* 23 (2) 127-145.

Liefner, I. (2003) Funding, resource allocation, and performance in higher education systems, *Higher Education*, 46 (4) 469- 489

Lincoln, Y,S & Guba E,G. (2000). Paradigmatic controversies, contradictions and emerging confluences, In Denzin, N. K. and Lincoln Y,S. (Eds.) *The handbook of Qualitative Research* pp 163-188 Thousand Oaks: Sage Publications. Inc.

Lindow, M. (2010). In Africa, Universities learn to Tap a Precious Resource: Alumni, *The Chronicle of Higher Education*, Washington DC, 9 May , vol. 56 (35) p A24-A24.

Maravanyika, O. E. (1990). Implementing Educational Policies in Zimbabwe, World Bank Discussion papers, Africa Technical Department Series. World Bank , Washington DC.

Ministry of Higher Education Strategic Plan. (2005 - 2010), Harare, Zimbabwe.

Mayring, P. (2000). Qualitative Content Analysis. *Forum for Social Research*1 (2) Retrieved on3 March 2010 from,

Maxcy, S. J. (2003). Pragmatic threads in mixed methods research in Social Sciences: The search for multiple modes of inquiry and the end of philosophical formalism. In A. Tashakkori & C. Teddlie, (Eds.), *Handbook of mixed methods in social and behavioural research.* Thousand Oaks, CA: Sage. (pp. 51-90).

Meriam, S. (1998). *Case Study Research in Education.* San Fransisco, Jossey, Bass.

Meyer, J. & Rowan, B. P. (1977). Institutionalized Organizations: Formal structure as myth and ceremony. *American Journal of Sociology.* (83) 340-363.

Meyer, J. W., & Scott, W. R. (1983). Centralization and the legitimacy problems of local governments. In J. W. Meyer & W. R. Scott (Eds.) *Organizational environments: Ritual and rationality*: 71-97. Beverly Hills, CA: Sage

Midlands State University, Strategic and Business Plans (2001-2015) Gweru, Zimbabwe.

Ministry of Higher Education, (2009). Government of Zimbabwe, Harare

Munene, I. I. & Otieno, W. (2008). Changing the course: equity effects and institutional risk amid policy shift in higher education financing in Kenya, *Higher Education,* 55: 461-479.

Mwiria, K., Ng'ethe, K. M., Ngome, C., Ouma-Odero, D., Wawire, V. & Wesonga, D. (2007). *Public and Private Universities in Kenya: new challenges, issues and achievements: Analysing the higher education system in Kenya,* the Partnership for Higher Education in Africa, James Curry, Oxford, East African Educational Publishers , Nairobi.

National Economic Revival Program (NERP): Measures to Address the Current Challenges, (2003). Government of Zimbabwe, Harare.

National University of Science and Technology Strategic Plan (2001-2005), Bulawayo, Zimbabwe.

National University of Science and Technology Act, (1990). Government Printer, Harare.

Neave, G and van Vught (1991) *Promethius Bound: The changing Relationships Between Government and Higher Education in Western Europe*: Oxford Pergamon Press.

Nkurumah, K. (1965). *Neo colonialism,The last stage of Imperialism,* Thomas Nelson and Sons Ltd. London.

Nkrumah-Young, K. K., Huisman, J. & Powell, P. (2008). The impact of funding policies in higher education in Jamaica, *Comparative Education.* Oxford. 44 (2) 215-227

Nyerere, J. K (1963). "Inauguration of the University of East Africa" in Nyerere Freedom and Unity [Uhuru na Umoja]: A selection from Writings and Speeches, 1950-65, Dar es Salaam: Oxford University Press, p 218-221

Nyerere J. K. (1967). *Education for self-reliance*. Dar es Salaam, Govt printer
Said, E. (1978). Orientalism, New York: random House.

Nziramasanga, C. T. (1999). Report of the Presidential Commission of Inquiry into Education and Training. Government of Zimbabwe. Harare

Olayiwola, S. (2010). Alternative Model of Funding for Academic Research in Nigerian Universities, *Higher Education Quarterly*, Oxford, vol. 64 (2) 140-160

Oliver, C. (1991). Strategic Responses to institutional processes, *Academy of Management Review*, 16 (1) 145-179
Pal, L. A. (2006). *Beyond Policy Analysis: Public Issue Management in Turbulent Times*. Toronto, Thomson Nelson.

Peet, R. C. & Hartwick, E. R (1999). *Theories of Development, New York.* The Guildford Press.

Powell, W. W., & DiMaggio, P J. (1991). *The new institutionalism in organizational analysis*. Chicago: University of Chicago Press.

Psacharopoulos, G. & Patrinos, H. (2002). Returns in Education: A further update: World Bank Policy Research, working paper 2881, September.

Pfeffer,J., & Salanchik, G. R. (1978). *The external control of organizations*. New York: Harper and Row.

Riddell, A. B. (1998). Reforms of Educational efficiency and quality in developing countries: an overview. *Compare*. Oxford. 28 (3) 277-292

Roberts , C. W. (1997). *Analysis for the Social Sciences: Methods for drawing Statistical Inferences from Texts and Transcripts*. NJ. Lawrence Erlbaum Associates.

Rowan, B. (2006). The new institutionalism and the study of educational organizations: Changing ideas for changing times. In H. D. Meyer & B. Rowan (Eds.) *The new institutionalism in education* (pp.15-32) Albany: State University of New York Press.

Rudestam, K. E., & Newton, R.R. (2001) Surviving your dissertation: A comprehensive guide to content and process(2nd ed.) Thousand Oaks, California: Sage Publications

Said, E. (1978). Orientalism, New York: random House.

Southern African Regional Universities Association. (2010). SARUA Leadership Dialogue on Rebuilding Higher Education in Zimbabwe: The Cape Town Accord and Call for Action. Retrieved on 28 August 2010 from, http://www.sarua.org/files/publications/SARUA

Scott, W.R. (2003). *Organizations: Rational, natural and open systems* (5th ed.), Upper Saddle River, N J. Prentice Hall.

Scott, W. R. (2001). (2nd ed.) *Institutions and Organizations,* Thousand Oakes. Sage: CA

Slaughter, S. Leslie. L (1997). *Academic capitalism, Politics, policies and the entrepreneurial university*, Baltimore: The John Hopkins University Press.

Spillane, J., & Burch, P. (2006). The institutional environment and instructional practice: Changing patterns of guidance and control in public education. In H. D. Meyer & B. Rowan (Eds.), *The new institutionalism in education* (pp. 87-102). Albany: State University of New York Press.

The Transitional National Development Plan. (1983). Harare, Government Printer, (p. 27).

Tight, M. (2009). Are academic workloads increasing? The Post-War survey evidence in the UK, *Higher Education Quarterly*, vol. 64 (2) 200-215

Tilak, J. B. G. (2003). "Higher Education and development" Conference paper: International Seminars University XXI. Internet: retrieved from www.mecgov.br/univxxi/pdf/Jandhyalg:pdf.

Thomas, H (2000) Power in the resource allocation process: The impact of rational systems, *Journal of Higher Education* 22 (2), 127

Thomas, H (1999). Managerial Implications for Adopting Formula-based Systems for Resource Allocation *Educational Management and Administration*. 27, (2) 183-191

University of Zimbabwe Amendment Act, (1990). Harare, Government Printer. Government of Zimbabwe.

University of Zimbabwe Act, (1982). Government of Zimbabwe, Harare.

University of Zimbabwe Five-Year Plan (2003-2007). Harare, Zimbabwe.
UNDP. (2003). Human Development Report, New York, Oxford University Press.

UNESCO. (2009).UNESCO Institute for Statistics. Retrieved from, http://stats.uis.unesco.org/unesco/

UNESCO. (2000). The World Education Forum: The Dakar Framework for Action, Education For All: Meeting Our Collective Commitment, Dakar Senegal, 26-28 April,(p 1-24)

Volk, C. S., Slaughter, S. & Thomas, S. L. (2001). Models of Institutional resource allocation; Mission, market and gender, *The Journal of Higher Education,* Columbus, 72 (4) 387- 414.

Weiler, H.N. (2000). States, Markets and University Funding: new paradigms for the reform of higher education in Europe. *Compare: A journal of Comparative Education*. 30 (3), 333-339

Wellington, J (2000). *Educational Research*, London, Continuum

Williams, P.R.C. (1989). *Report of the Commission of Inquiry into the Establishment of a Second University or Campus*. Harare, Government of Zimbawe.

Woodward, J. (1965). *Industrial Organization: Theory and Practice*. New York: Oxford Press.

World Bank. (2009). Accelerating catch-up: tertiary education for growth in Sub-Saharan Africa/AFTHD, Washington DC, World Bank,

World Bank. (2005). *World Development Indicators*, Washington DC.

World Bank,

World Bank. (2004). Zimbabwe Country Assistance Evaluation: Operations Evaluation Department, Washington DC, World Bank.

World Bank. (2004a). "Improving Tertiary Education in Sub-Saharan Africa: Things that work: Report of a regional training conference held in Accra, Ghana, September 22-25, 2004 retrieved from www.worldbank.org/afr/teia

World Bank (2000) *Higher Education and Developing Countries: Peril and Promise*. Washington, DC.

World Bank. (2000a). *World Development Indicators*, Washington DC. World Bank.

World Bank. (1996). Retaining Teaching Capacity in African Universities, Washington DC, World Bank

Wyk, B & Higgs, P. (2007). The call of an African University: A critical Reflection. *Higher Education Policy*. 20 (p 61-71)

Zimbabwe Programme for Economic and Social Transformation, (1996-2000), Government of Zimbabwe, Government Printer, Harare.

Zucker, L. G. (1991). Postscript: Microfoundations of institutional thought. In W. J. Powell & P. J DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 103-107). The University of Chicago Press.

APENDIX I: The Zimbabwe Open University Programs

Faculty of Commerce and Law
Bachelor of Commerce in Banking and Finance (4yrs)
Bachelor of Commerce in Accounting (4yrs)
Bachelor of Commerce in Marketing (4yrs)
Bachelor of Commerce in Human Resource Management & Industrial Relations (4yrs)
Executive Diploma in Business Leadership (18 months)
Master in Business Administration (2.5 yrs)

Faculty of Arts, Education and Humanities
Bachelor of Arts in English & Communication Studies
Master of Education (Educational Administration, Planning and Policy Studies)
Bachelor of Education in Educational Administration, Planning and Policy Studies
Bachelor of Arts Media Studies (4yrs)
Bachelor of Science Honours Degree in Counselling (4yrs)
Bachelor of Science Honours Degree in Psychology (4yrs)
Bachelor of Science Honours degree in Special Education (4yrs)
Diploma in Education (Primary) Matabeleland North & Mashonaland Central Region)
Bachelor of Education (Secondary)

Faculty of Science (4yrs)
Bachelor of Science in Nursing
Bachelor of Science Mathematics and Statistics
Bachelor of Science in Agricultural Management
Bachelor of Science Honours in Geography and Environmental Studies
Bachelor of Science in Physical Education and Sports
Mathematics Bridging Course (1 Semester)

APPENDIX II: Letter of Consent to Participants

Department of Educational Policy Studies
7-104 Education North
University of Alberta
Edmonton
Canada T6G 2G5

Dear Respondent

I am a doctoral student at the University of Alberta. As part of the requirements for the completion of my degree I am conducting research in the area of financing higher education.

The thesis title is, **"The Impact of Resource Allocation methods on the performance of the Academic staff at Public Universities in Zimbabwe."** The study is important as it seeks to throw light on the link between resources and performance of public universities in Zimbabwe. The study is looking more specifically at how faculty cope with teaching and research given the current levels of university funding.

Your participation will be treated with strict confidentiality. No individually identifiable information will be disclosed or published and all results will be presented as aggregate, summary data. If you have any questions regarding this

[redacted]

Michael Kariwo

APPENDIX: III Interview Schedule

1. How are financial resources allocated from government and within the university?
2. Is there a link between resources and the performance of a university?
3. Based on your experience, what are the issues or problems affecting resource allocation in your university?
4. What can the institution do to increase its revenues without increasing its dependence on government funding?
5. What kinds of resources do professors require in order to perform their duties?
6. How do you perceive professors meet these needs given the level of the resources available?
7. What is the impact of the level of funding of the university on the performance of professors?
8. How can universities cope with current problems given the current level of funding?
9. How does the university evaluate its performance of professors?
10. What suggestions can you make on the way forward?

LIST OF TABLES

1 Participation in Tertiary Education: Select Countries
2 Enrolments at Public Universities
3 The Zimbabwean Open University Enrolments
4 Enrolments at Private Universities
5 Emerging Themes

LIST OF FIGURES

I. Inputs and Outputs in Higher Education
II. Research Design
III. Re-conceptualizing Higher Education funding in Zimbabwe

C12332